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PREFACE.

In preparing a work of this kind a difficulty is always experienced in making it interesting to persons outside the Colony who are not concerned about the details of loca affairs, and at the same time useful to those who are engaged in the active life of the Colony and who require such details It is believed that the difficulty has been fairly met. Every care has been taken to correct such errors as may have passed through previous editions, and to keep this issue free from them. If, however, any such should be discovered, it would be deemed a favour if their nature and position were pointed out.

The chapters relating to "Shipping" and "Commerce" were sent to press too early to admit of the figures relating to 1898 being inserted in their proper place. It is satisfactory to be able to record that the progress indicated in the text has been well maintained. The shipping entering and clearing the ports of New South Wales during 1898 showed a tonnage of 6,919,928, as against 6,744,431 in the preceding year. The imports for the year were valued at £24,453,560, compared with £21,744,350 in 1897, showing an increase of £2,709,210, and the exports at £27,648,117, as against £23,751,072, showing an increase of £3,897,045. The total trade was therefore £52,101,677. This exceeds the total of 1897 by £6,606,255, and is also larger than the trade of any other year of the Colony's history.

In order to help settlers to tide over a season of unusual severity, an "Advances to Settlers Act" was passed early in 1899, empowering the Government to grant financial assistance to applicants.

Sydney, 23 *May*, 1899. T.A.C.

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HISTORICAL SKETCH.

IT is impossible to say who were the first discoverers of Australia, although there is evidence that the Chinese had some knowledge of the continent as far back as the Thirteenth Century. The Malays, also, would seem to have been acquainted with the northern coast; while Marco Polo, who visited the East at the close of the Thirteenth Century, makes reference to the reputed existence of a great southern continent. There is in existence a map, dedicated to Henry the Eighth of England, on which a large southern land is shown, and the tradition of a Terra Australis appears to have been current for a long period before it enters into authentic history.

In 1503, a French navigator named Binot Paulmyer, Sieur de Gonneville, was blown out of his course, and landed on a large island, which was claimed to be the great southern land of tradition, although Flinders and other authorities are inclined to think that it must have been Madagascar. The Portuguese also advance claims to be the first discoverers of Australia, but so far the evidence cannot be said to establish their pretensions. As early as 1598, Wytfliet describes the Australis Terra as the most southern of all lands, and proceeds to give some circumstantial particulars respecting its geographical relation to New Guinea, venturing the opinion that, were it thoroughly explored, it would be regarded as a fifth part of the world.

Early in the Seventeenth Century, Philip the Third of Spain sent out an expedition from Callao, in Peru, for the purpose of searching for a southern continent. The little fleet comprised three vessels, with the Portuguese pilot, De Quiros, as navigator, and De Torres as admiral, or military commander. They left Callao on the 21st December, 1605, and in the following year discovered the island now known as Espiritu Santo, one of the New Hebrides Group, which De Quiros, under the impression that it was indeed the land of which he was in search, named "*La Austrialia del Espiritu Santo.*" Sickness and discontent led to a mutiny on De Quiros' vessel, and the crew, overpowering their officers during the night, forced the captain to navigate his ship to Mexico. Thus abandoned by his consort, De Torres, compelled to bear up for the Philippines to refit, discovered and sailed through the strait that bears

his name, and may even have caught a glimpse of the r
of the Australian Continent. His discovery was not, h
known until 1792, when Dalrymple rescued his name i
bestowing it upon the passage which separates New
Australia. De Quiros returned to Spain to re-engage
of petitioning the king to despatch an expedition for t
prosecuting the discovery of the Terra Australis. H
successful in his petitions, but died before accomplishing
was buried in an unknown grave in Panama, never be
to set his foot upon the continent the discovery of whi
spiration of his life.

During the same year in which De Torres sailed thro
destined to make him famous, a little Dutch vessel called
or Dove, set sail from Bantam, in Java, on a voyage of di
ship entered the Gulf of Carpentaria, and sailed south a
Keerweer, or Turn-again. Here some of the crew land
attacked by natives, made no attempt to explore the coun
Dirk Hartog discovered the island bearing his name.
Leeuwin, or Lioness, made some discoveries on the sou
and during the following year the yachts Pera and Arn
the shores of the Gulf of Carpentaria. Arnhem Land, a
Northern Territory, still appears on many maps as a me
voyage. Among other early Dutch discoverers were Van
in 1629, in the Gulf of Carpentaria; Nuyts, in the Gu
along the southern coast, which he called, after himself,
De Witt; and Pelsart, in the Batavia. Pelsart was wre
man's Abrolhos; his crew mutinied, and he and his party s
from want of water. The record of his voyage is intere
fact that he was the first to carry back to Europe an aut
of the western coast of Australia, which he described in a
able terms. In 1642, Abel Janszen Tasman took up the
discovery, and added Tasmania (long known as Van D
and New Zealand to the geographical knowledge of the
sequently made a voyage to the Gulf of Carpentaria, and
northern coast.

The first English navigator to sight the Australian
William Dampier, who made a visit to these shores in 1
cargo of the Cygnet, a trader, whose crew had turned bu
his return to England he published an account of his
resulted in his being sent out in the Roebuck in 1699 to
cute his discoveries. To him we owe the exploration of
about 900 miles—from Shark Bay to Dampier's Archipela
to Roebuck Bay. He appears to have landed in several p
of water. His account of the country was quite as u
Pelsart's. He described it as barren and sterile, and al
animals, the only one of any importance somewhat resembl

a strange creature, which advanced by great bounds or leaps instead of walking, using only its hind legs, and covering 12 or 15 feet at a time. This is the first notice of the kangaroo which has come down to us. Between Dampier's first and second voyage Vlamingh visited the south-west coast, and entered and named the Swan River, so called from the number of black swans in the locality.

The great voyage of James Cook, in 1769-70, was primarily undertaken for the purpose of observing the transit of Venus, but he was also expressly commissioned to ascertain "whether the unexplored part of the Southern Hemisphere be only an immense mass cf water, or contain another continent." The vessel fitted out for the voyage was a small craft of 320 tons, carrying twenty-two guns. She was built originally for the coal service, with a view rather to strength than to speed. Chosen by Cook himself, she was renamed the Endeavour, in allusion to the great work which her commander was setting out to achieve. Mr. Charles Green was commissioned to conduct the astronomical observations, and Sir Joseph Banks and Dr. Solander were appointed botanists to the expedition. After successfully observing the transit from the island of Tahiti, or Otaheite, as Cook wrote it, the Endeavour's head was turned south, and then north-west, beating about the Pacific in search of the eastern coast of the great continent whose western shores had been so long known to the Dutch. Circumnavigating and minutely surveying New Zealand, Cook then stood due west, in order to carry out the instructions given him.

After a voyage of nearly three weeks, Cook, on the 19th April, 1770, sighted the eastern coast of Australia, at a point which he named after his first lieutenant, who discovered it, Point Hicks. This he placed in atitude 38° south and longitude 148° 50′ east; but no such headland has since been identified, and it is thought Cook must have been deceived n some manner by the sandhills of the Ninety-mile Beach. Four eagues farther to the north-east he discovered and named Ram Head, but the first important point observed was a bare and sandy headland, o which he gave the name of Cape Howe.

After passing and naming Mount Dromedary, the Pigeon House, Point Upright, Cape St. George, and Red Point, Botany Bay was discoverec n the 28th April, 1770, and as it appeared to offer a suitable anchor ge, the Endeavour entered the bay and dropped anchor. The ship rought-to opposite a group of natives, who were cooking over a fire. ook and his crew, unacquainted with the character of the Australian borigines, were not a little astonished that these natives took no notice them or their proceedings. Even the splash of the anchor in the ater, and the noise of the cable running out through the hawse hole, in way disturbed them at their occupation, or caused them to evince the ghtest curiosity. But as the captain of the Endeavour ordered out e pinnace and prepared to land, the natives threw off their nonchalce; for on the boat approaching the shore, two men, each armed with a bundle of spears, presented themselves on a projecting rock threatening signs to the strangers. It is interesting to not ingenious "wommera," or throwing-stick, which is peculiar to was first observed on this occasion. As the men were evi termined to oppose any attempt at landing, a musket was between them, in the hope that they would be frightened by but it produced no effect beyond causing one of them to bundle of spears, of which, however, he immediately repossesse and with his comrade resumed the same menacing attitude. one cast a stone towards the boat, which earned him a small shot in the leg. Nothing daunted, the two ran bac bush, and presently returned furnished with shields made with which to protect themselves from the firearms of Such intrepidity is certainly worthy of passing notice. U American Indians, who supposed Columbus and his crew to natural beings, and their ships in some way endowed with who were thrown into convulsions of terror by the first dis firearms which they witnessed, these Australians were neith to wonder by the ship, nor overawed by the superior numb known weapons of the strangers. Cook examined the b pinnace, and landed several times ; but by no endeavour could the natives to hold any friendly communication with him. known circumstance of the great variety of new plants here from which Botany Bay derives its name, should not be pa Before quitting the bay the ceremony was performed of hoi Union Jack, first on the south shore, and then near the n formal possession of the territory being thus taken for the Briti During the sojourn in Botany Bay the crew had to perform t duty of burying a comrade—a seaman named Forby Suther was in all probability the first British subject whose body was c to Australian soil.

After leaving Botany Bay, Cook sailed northward. He saw a Port Jackson, but forebore to enter the finest natural harbou tralia. Broken Bay and other inlets, and several headlands, seen and named, but the vessel did not come to an anchor till Bay was reached, although the wind prevented Cook from ent harbour. Still sailing northward, taking notes as he proc a rough chart of the coast, and landing at Bustard and Ke and the Bay of Inlets, Cook passed over 1,300 miles without t rence of any event worthy of being chronicled, till suddenly at 10 o'clock the water was found to shoal, without any sign o or land. While Cook was speculating on the cause of this phe and was in the act of ordering out the boats to take soun Endeavour struck heavily, and fell over so much that the g cables, and other heavy gear had at once to be thrown ove lighten the ship. As day broke, attempts were made to float off with the morning tide ; but these were unsuccessful. The rising so rapidly in the hold that with four pumps constantly going the crew could hardly keep it in check. At length one of the midshipman suggested the device of "fothering," which he had seen practised in the West Indies. This consists in passing a sail, attached to cords, and charged with oakum, wool, and other things, under the vessel's keel, in such a manner that the suction of the leak may draw the canvas into the aperture, and thus partially stop the vent. This was performed with great success, and the vessel was floated off with the evening tide. The land was soon after made, near the mouth of a small stream, which Cook called, after the ship, the Endeavour River. A headland close by he named Cape Tribulation. The ship was steered into the river, and there careened and thoroughly repaired. Cook having completed the survey of the east coast, to which he gave the name of New South Wales, sighted and named Cape York, the northernmost point of Australia, and took final possession of his discoveries from latitude 38° south northward to latitude 10½° south, on a spot which he named Possession Island, thence returning to England by way of Torres Straits and the Indian Ocean.

The favourable reports brought to England by the Endeavour on her return, and the graphic account of his voyage published by Cook, together with the fact that Great Britain had just lost her North American colonies by their successful rebellion, turned all eyes to Australia, or New Holland, as it continued to be called. The difficulty of disposing of their criminal population was only one of the causes which determined the Government of the day to found the colony of New South Wales; for it will become evident, as this narrative proceeds, that all concerned felt they were engaged in founding a new home in the Southern Hemisphere for the British people, and that visions of even greater progress than has yet been attained filled the minds, not only of Viscount Sydney and Governor Phillip, but also f many reflecting persons in the colony itself. The truth of this view is amply demonstrated by the testimony of several contemporary writers.

It was in the early part of 1787 that Viscount Sydney, Secretary of State for the Colonies, determined to plant a colony in New South Wales, and by May of that year the First Fleet had been assembled. t consisted of the 20-gun frigate Sirius, the armed tender Supply, hree storeships—the Golden Grove, Fishburn, and Borradale; and six ransports—the Alexander, Scarborough, Lady Penrhyn, Prince of Wales, riendship, and Charlotte. The largest of these vessels measured only 50 tons, and the smallest was no more than 270 tons. On board the x transports were packed, according to the statement made by Collins his history, no fewer than 564 men and 192 women, all prisoners who d been sentenced to expatriation. There were also carried 168 arines and 10 officers, commissioned and non-commissioned. These, ith 5 medical men, a few mechanics, and 40 women—wives of arines—together with 13 children—the offspring of the convicts—

made up the total number of persons despatched to fo colony. Captain Phillip, R.N., was placed in command of t dition, and given a commission as Governor and Captain-G New South Wales. Second in command was Captain John of the Sirius, and Mr. David Collins accompanied the expe Judge-Advocate.

The fleet sailed in May, 1787, and after calling at Rio Janeiro in Botany Bay in the beginning of January, 1788. A cursory tion convinced Captain Phillip that a more unsuitable site fo settlement could hardly have been chosen than the shores of t Despite the profusion of new plants which had so delighted B Solander, the neighbourhood of Botany Bay is by no mean The scarcity of good water was a further disadvantage, w bay itself was so shallow as to forbid ships approaching th necessitating the erection of piers and jetties of great length. besides, exposed to the full swell of the Pacific, without bays or coves to afford shelter. The Governor accordingly detern explore the coast in search of a more suitable site for the set After proceeding with three of the boats about nine miles, himself abreast of the entrance to Port Jackson, which Cook seen from a distance, and had marked on his chart as a har boats. Undeterred by this, Phillip rounded the South Head, saw opening before him the whole expanse of one of the finest in the world. For miles to the west stretched the peaceful Port Jackson, which must have delighted the explorers, dish as they had been by the appearance and surroundings of Bot In place of the stunted scrub which formed the greater part vegetation of that locality, Port Jackson was found to be sur by a thick forest of noble trees, which extended to the water's e promised an abundant supply of timber for building purposes. place of the open roadstead at Botany, a countless succession and inlets opened on the astonished gaze of the hardy navigators proceeded up the harbour. Deep water was found to extend very base of the rocks, thus obviating any necessity for ex wharves, the construction of which must have occupied the lit munity for many months, to the neglect of more immediately wants.

The Governor's choice of the site of the present metro Australasia was determined by the fact that, about six miles f entrance, an apparently perennial stream of the purest water wa discharging itself into a beautiful sandy inlet, which was named Cove, in honour of the statesman under whose auspices the en had been undertaken. Before finally deciding on this site, Phillip spent three days in exploring the various bays, but was co in his original choice by the fact that no such stream of wa found elsewhere, though in other respects numerous positions suitable presented themselves.

urning immediately to Botany, preparations were made for bringing lony round to Sydney Cove, when, as the fleet was standing out of y, an interesting incident occurred—two strange vessels, evidently g for the entrance, were discerned in the offing. Captain Phillip ut in the Supply to meet them, and they proved to be a French ing party under the command of Jean François Galaup, Comte Pérouse, their vessels being the frigates Astrolabe and Boussole. an interchange of courtesies, the French were left to refresh and n Botany Bay. They stayed there till March, 1788, and buried their company on shore—Father Le Receveur, of the Order of St. s, the naturalist of the expedition, who died of wounds received encounter with the natives of the South Seas. His tomb is still at La Pérouse, near the north head of Botany Bay, where also a nent was placed, in the year 1825, to the memory of the com- r of the expedition, who was shipwrecked and whose crew were red at Vanikoro, one of the Santa Cruz Islands. The monument ected by Messrs. De Bougainville and Ducampier, commanding the n war vessels Thétis and Espérance, then lying in Port Jackson.

Captain Phillip's arrival in Sydney Harbour, on the memorable anuary, 1788, the ships anchored in the Cove, and preparations t once made for landing the colonists. The clearing of the ground vicinity, and along the banks of the little stream, was commenced, hen a sufficient space had thus been obtained a flagstaff was erected, e Union Jack run up. After the firing of three volleys by the s, the Governor read his commission, and addressed words of counsel, g, and encouragement to the prisoners, the ceremony closing with l festivity. Arduous labour succeeded this scene, for it was well tood that unless the settlers could raise supplies for themselves, istence of the colony would be precarious, as the store of provisions r possession was calculated to last only a very short time.

ordingly, ground was cleared at the head of Farm Cove, adjoining ttlement, and an attempt was made to raise wheat, but time has that the soil in the immediate neighbourhood of Sydney is not to the cultivation of this cereal, and even if a good crop had been ed the colonists must have starved while it was maturing. No food mentioning was procured from the land, and the little community lready on the brink of starvation, when a ship arrived with another of colonists, but without stores. This brought matters to a climax, upon Governor Phillip sent the Sirius to the Cape Colony, and the to Batavia, to procure provisions, which, however, could only be ed in insufficient quantity, so that in a few weeks after the return e vessels the state of affairs became as bad as before, and starvation stared the colony in the face. Under these circumstances, every- cluding the Governor himself, was placed on short allowance, and he sheep and cattle which had been reserved for breeding purposes killed for food. In this state of affairs the Governor bethought f of Norfolk Island, whither, shortly after his arrival, he had sent

Lieutenant Philip Gidley King, of the Sirius, to establish a colony. A detachment of 200 convicts, with a guard of 70 m was, therefore, despatched to the island. On arrival, it was fou King and his men had cleared a considerable portion of land, a succeeded in raising an abundant crop. But the Sirius, in whi new detachment sailed, was wrecked on a reef off the island, so t supplies were procured thence at that time.

When the prospects of the settlement at Sydney Cove had their gloomiest, three store-ships arrived, and snatched the colon the very brink of destruction by famine. This tided over the di and so great a privation of food was never again experienced. difficulties, however, beset the settlers by the arrival of some shi of prisoners, most of whom were in a sick and dying conditi 1,700 men and women embarked, 200 had died on the voya several hundred more were found to be *in extremis* on arriv the midst of these horrors, the Governor's responsibilities were increased by the attempts of some of the prisoners to escape f colony. Some took to the bush; others stole boats and put intending to reach the Dutch settlements in the Indian Ocean. as this latter attempt may appear, it was in once instance successf men and a woman, in an open boat, succeeded in reaching Timo they were imprisoned and sent back to Sydney on the first oppo Numerous efforts were made to escape from the settlement the ignorance of the convicts being such that many imagined the walk overland to China, and not a few perished in the bus making the attempt.

Governor Phillip's health gave way under the cares and anxieti office, and in 1792 he returned to England, where he received a in reward for his exertions in founding the colony, and die advanced age. More than a century later, in the year 1897, monument to his memory was unveiled in the Garden Palace G Sydney, by the Governor of the day, Lord Hampden. Until the of a successor to Phillip, Major Grose and Captain Paterson, offi charge of the military, administered the government of the In 1795, Captain Hunter, who after the loss of the Sirius had England, arrived as the second Governor; and with his reapp affairs took a new turn. He brought out a number of free s mostly agriculturists; and some fine alluvial land having be covered on the banks of the Hawkesbury, farming was succ begun, and in a short time more than 6,000 acres were under c wheat and maize. The attempts to introduce cattle were for unsuccessful, but in 1796 a herd of 60 head was discovered "Cowpastures," near Camden. These were the descendants o cattle which had strayed from the settlement several years befor though their quality was found to have deteriorated, they proved welcome addition to the live stock of the settlement. In 180 Captain Hunter left the colony, the population was over 6,000; a had been made to penetrate into the interior, although without success; the Hunter River and its coal-mines had been discovered, and the mines were being worked by a detachment of prisoners; the city of Newcastle had been founded; and the New South Wales Corps, a military body enlisted for service in the colony (the first detachments of which had arrived in 1790), formed an efficient garrison and guard over the more refractory prisoners. During Governor Hunter's term of office, Bass and Flinders minutely examined the coast to the south of Sydney, in a small boat only 9 feet over all; and the former discovered the strait which bears his name, thus proving Tasmania to be an island, and not the southern extremity of the continent, as previously supposed.

The next Governor was Philip Gidley King, previously mentioned as the Lieutenant of the Sirius who had been despatched by Phillip to found a settlement on Norfolk Island. Though all fears of famine had now disappeared, Governor King soon found himself involved in difficulties of a scarcely less distressing nature. To explain these it will be necessary to describe the constitution of the New South Wales Corps. This body had been specially raised for service in the colony, the officers of the King's regiments not unnaturally objecting to be sent to such a far distant settlement, where they knew they would find no intellectual occupation, and that their sole work would consist in acting as a prison guard, or, at most, in making a few raids, in alleged reprisals for the misdeeds of the ill-used, and often sorely provoked, aborigines. As a military guard of some sort was necessary, this corps was raised, and a few enterprising spirits—many of whom had never served before—were induced to accept commissions, with the view of obtaining grants of land and making their fortunes in the colony. Unfortunately, the readiest means to this end was found in the import trade, and as rum was in great request, the officers of the New South Wales Corps became importers of that spirit in large quantities—and even set up private stills in defiance of a Government order. Governor King was specially commissioned to put a stop to the traffic, a full account of which will be found in another part of this volume. King proceeded to act with great promptitude, and his vigorous proceedings in sending away thousands of gallons of spirits and wine created a storm of indignation among the importers, and greatly embittered the officers of the New South Wales Corps against the Government.

During King's time, a serious mutiny occurred among the prisoners. The more tractable of these were "assigned" as servants to the settlers, and engaged in working the farms and squattages; but the more reckless characters, made desperate in many instances by the treatment they received, were worked on the roads, in chain-gangs. A party of over 300 of these chain-gang men was employed at Castlehill, on the road between Parramatta and Windsor. These men, taking advantage of the small number of their guard, abandoned their work, managed to remove their irons, seized some firearms, and marched towards the Hawkesbury, expecting to be reinforced by the men employed in the neighbourhood.

But Major Johnston, second in command of the New South Corps, pursued them with only twenty men, and on coming them, charged with such precipitation that the mutineers we to lay down their arms and beg for mercy. Three or four ringleaders were afterwards hanged, but the rest were permi return to their duty on undertaking to be of good conduct future.

An event of the utmost importance to the colony also took plac the administration of Governor King. This was the initiation growing. John Macarthur, who had held a commission as cap the New South Wales Corps, procured, with great trouble anc verance, some Spanish merinos, and having obtained a grant of acres of land across the Cowpasture River, which estate he "Camden," commenced the growth of wool on a large scale. In time his enterprise showed every sign of a successful issue, to th benefit of the colony generally, and his own personal advanta spite of these evident signs of material progress, however, G King was so worn out with the conflicts caused by his end to suppress the rum traffic, and was in such constant collisic the officers of the New South Wales Corps on that account, seized the first opportunity of leaving the colony, and was su in the Government, in 1806, by William Bligh, a post-captain Navy.

Governor Bligh was a distinguished naval officer. His wo voyage after the Mutiny of the Bounty had caused the Imperial ment to entertain a high opinion of his conduct, as well as of his and determination. His services were numerous, and he had be licly thanked by Lord Nelson, after the bombardment of Cope for the gallantry and skill which he displayed on that occasion. he was selected as a fit man to crush the clique of officers engage rum traffic, and to purify official life in the colony. King had be partially successful in this direction, and the British Governme the strictest injunctions to Captain Bligh to stop the trade in Accordingly, in February, 1807, he issued the following general o "His Excellency the Governor laments to find by his late visit t the colony that the most calamitous evils have been produced sons bartering, or paying, spirits for grain of all kinds, and the saries of life in general, and to labourers for their hire; such proc depressing the industrious and depriving the settlers of their co In order, therefore, to remedy these grievous complaints, and to the inhabitants, who have suffered by the traffic, he feels it his put a total stop to this barter in future, and to prohibit the exch spirits or other liquors as payment for grain, animal food, apparel, or any other commodity whatsoever, to all descriptions sons in the colony and its dependencies."

This order is in itself sufficient to indicate to what fearful the "rum currency" had been carried. Naturally it would ha expected that all respectable people, the military and ex-military especially, would have joined the Governor heart and soul in his efforts to put a stop to the traffic, and induce a more healthy state of things. Such, however, was not the case; and the struggle in respect to the illicit trade continued throughout the whole period of Bligh's governorship.

Other matters embittered the relations between the Governor and the colonists, and in these Bligh was not so obviously in the right as in his attempt to put down the contraband traffic in spirits. The contest reached its climax on the arrest of John Macarthur, whose efforts to promote the growth of wool have been alluded to. That gentleman had become specially obnoxious to the Governor; and, as he was also the chief trader in the community, he was selected as a scapegoat for the sins of the rest. Matters were brought to a crisis in the following manner, though the immediate circumstances of his prosecution had no direct connection with the barter of spirits. Mr. Macarthur had been part owner of a vessel that traded to Tahiti for salt pork and other articles for the supply of the colony. While this vessel was lying in Port Jackson, he received a summons from Mr. Atkins, the Judge-Advocate—that is, Chief Justice—to appear before him to make answer to a complaint on the part of the crew of his vessel, of withholding from them their wages, in consequence of which they alleged that they had been compelled to break through the port regulations by coming ashore without special order. Macarthur returned an answer in writing, explanatory of his conduct in the matter, but did not obey the summons by appearing in person. This was construed to be an act of contumacy, which some attributed to a feeling of personal resentment towards the Governor, engendered by the action of the latter against the "rum currency."

A warrant was accordingly issued for Macarthur's apprehension, and on the 25th January, 1808, he was brought before the Judge-Advocate and a military jury of six, consisting of officers of the New South Wales Corps—such being at the time the composition of the Supreme Court of the colony. Mr. Macarthur objected to the Judge-Advocate sitting on his trial, on the ground that he bore him personal ill-feeling, for which assertion it would appear that there was some foundation, especially as Atkins' adviser throughout the whole proceedings was one George Crossley, a transported attorney, who is believed to have been an enemy of Macarthur. Although the defendant's objection was sustained by the six military officers, the Judge-Advocate refused to abdicate his position, and the Governor declined to supersede him—for which, indeed, he had no authority, Atkins having been appointed by the British Government.

At this juncture, the Governor summoned the six officers to his presence to explain their conduct in supporting Macarthur's protest and refusing to sit with the Judge-Advocate, but they declined to obey. The Governor also sent several times during the next day to Major

Johnston, the Commandant, at his residence at Annandale, as
to confer with him as to the conduct of his subordinates. The
however, declined to come to town, on the plea of ill-health.
an evident subterfuge, for between 6 and 7 p.m. on the same
Anniversary of the foundation of the colony) he suddenly m
appearance in the Barrack Square, where, if we may believe h
ment, he found everything in a state of ferment and confus
himself beset with the clamours of a number of the leading inh
civil as well as military, calling upon him to put the Govern
arrest. He accordingly marched at the head of his regiment, wit
beating and colours flying, to Government House, and Bligh wa
close confinement in his own residence. Johnston thereupon
the government, his first act being to suspend the Judge-Advo
Commissary, the Provost-Marshal, the Chaplain, and other
officials, and to appoint others to act in their place.

Major Johnston continued to administer the government
Lieutenant-Colonel (Foveaux) superseded him, as the senior
the colony, and eventually Colonel Paterson came from Tasma
assumed the direction of affairs. Both these officers approved Jo
proceedings, but the latter set Bligh at liberty, after a dete
twelve months, on condition of his proceeding straight to
in a vessel which was then ready to sail. Bligh promise
so, but on his way called at Tasmania, where the military au
attempted to detain him; he was, however, successful in escapi
hands.

News of the affair had meanwhile reached England, and the
ment, being very much concerned at the proceedings of the
despatched Lieutenant-General Macquarie to the colony as G
His instructions were to reinstate Governor Bligh for twenty-fo
to assume the government himself, and to send Johnston hom
close arrest. Bligh could not be reinstated, as he had left Syd
Macquarie's first act was to arrest Major Johnston, who wa
quently tried by court-martial in England and sentenced to be c
the leniency of the sentence being such as to call forth special
from the Prince Regent, in a minute appended to the pro
distinctly stating that it was not to be drawn into a p
Johnston afterwards returned to the colony, and died at his
Annandale.

With the arrival of Governor Macquarie, the colony entered o
of decided progress. The final abolition of the traffic in rum was
by a marked improvement in the morals of the population.
were established, and the children, who had hitherto grown up
ignorance, were taught to read and write, and instructed in usef
crafts. An impetus was given to exploration; and the dwellin
settlers in the bush were much improved by the efforts of the
during the annual tours which he made through the colony.
and public buildings were erected, asylums founded, and a bet

was given to society generally by the exertions of this philanthropic Governor, ably seconded by the endeavours of his high-minded wife, who laboured to improve the condition of her sex and the children in the colony. Among the many beneficial works undertaken by Macquarie, by far the most important was the road over the Mountains, *via* Lapstone Hill and Mount Victoria, to Bathurst. After many attempts to penetrate the Coast Range, it had at last been successfully crossed, in 1813, by Blaxland, Wentworth, and Lawson, names memorable in the annals of the colony. An account of the expedition will be found in another place.

Another distinguishing feature of Governor Macquarie's policy, which was almost as beneficial as his efforts to instruct the population in religion and morality, and to open up the country, was the favour with which he treated the "emancipists"—that is, those convicts who had become free by serving out their sentences. When it is remembered that the majority of those transported had been guilty of petty offences only, or of acts which in the present day would scarcely be deemed offences at all, the Governor's determination to give every encouragement in the way of official recognition to emancipists must be strongly commended. To transport a person for a petty offence, to ostracise him for the rest of his life, and to extend the social ignominy to his children, was in the highest degree unjust; and Governor Macquarie, as a humane man, set his face against the custom. In religious matters he showed a largeness of mind in advance of public opinion, by removing, as far as lay in his power, the religious disabilities under which a large section of the colonists laboured. In 1821, after a longer term of office than has been allotted to any Governor either before or since, "L. Macquarie, Esq.," as he modestly styles himself in the inscriptions on the public buildings he erected—discarding the prestige attaching to his military rank—left the colony, to the regret of the entire population, and was succeeded by Sir Thomas Brisbane.

The new Governor trod in the steps of his predecessor. He carried on the work of exploration, and in 1823 despatched Mr. Oxley, Surveyor-General, to survey Moreton Bay, Port Curtis, and other parts of the north-eastern coast-line. Following up the information furnished by a cast-away named Pamphlett, Oxley discovered a river debouching into Moreton Bay, which he named after the Governor; and a town was founded on its banks, also named Brisbane, which has become the capital of the colony of Queensland. The Murray and Murrumbidgee Rivers were discovered soon afterwards by Hovell and Hume, who had formed an exploring party under the auspices of the Governor. The immigration of free settlers was much encouraged by Sir Thomas Brisbane, the result being the arrival of numbers of young men, many possessing capital, who became squatters, and soon wrought an important change in the colony, by causing the costly Government farms to be broken up. As a consequence, the wants of the community were more cheaply and better supplied by private enterprise. Censorship of the press, which had been strictly enforced up to this time, was abolished by G Brisbane, by proclamation dated 15th October, 1824. Trial by introduced about the same period, by which the privilege of bei by his peers was extended to every man, the assessors to tl before that time having been chosen exclusively from officers Army. Sir Francis Forbes, the first Chief Justice, was mainly mental in introducing this great and salutary change in the adı tion of the law. The first normally constituted jury sat at the N Quarter Sessions of 1824. An Act had also been passed by the Parliament, in 1823, which conferred another most important on the colony. It was provided that the Governor should no Legislative Council of seven members, by whose advice he w guided. Previous to the appointment of this Council, the C had been virtually absolute in power, the only check upon him l public opinion of the colonists, and the authority of the British ment as represented by the Secretary of State for the Colonie Council of Seven was really the nucleus around which have gath present Constitution and the liberties we now possess. It was step—in which, says the proverb, all the difficulty consists; a was only after much agitation that even this initial effort was to be made.

The next Governor was Major-General Ralph Darling, who, fi colony in the state of progress above described, by a series of nearly succeeded in destroying the beneficial result of the effor predecessors. Arriving in Sydney in 1825, he soon became in very serious disputes with the colonists and the press. In meet the criticisms of the latter, a number of Acts were passe Council, which had the effect of stifling obnoxious comments for One good result which sprang indirectly from these arbitrary Act enlargement, in 1828, of the Legislative Council from seven t members. The Bushranging Act was passed by this Counc down a prevalent nuisance—the gangs of escaped prisoners whc the principal roads and robbed travellers without distinction.

The work of exploration made some progress in Governor time, the famous journeys of Captain Charles Sturt havi undertaken with his sanction. Other explorers were Allan Cun Hume, and George Macleay, son of Alexander Macleay, the Secretary of that day.

It was strongly suspected at this time that the French had of forming settlements in Australia. French ships constantly off the coast, ostensibly fitted out for the purpose of making geo discoveries, but really, it was believed, to found a colony in tralian territory which they might find unoccupied. To frust suspected design, Darling despatched two expeditions, in King George's Sound and Western Port, in which neighbou was surmised the French were hovering. To show that there ground for these fears, chimerical as they may now appear, it will be sufficient to quote the Governor's instructions to the officers in charge of the expeditions. He says :—"Should you find the French already in occupation, you will, notwithstanding, land the troops, and signify to the Frenchmen that their continuance with any view of establishing themselves, or colonisation, will be considered an unjustifiable intrusion on his Britannic Majesty's possessions." No Frenchmen, however, were found at either of the places named, and settlements were therefore promptly formed at Western Port, and at King George's Sound and Swan River, in Western Australia. When Governor Darling left the colony in 1831, much progress had been achieved, in spite of the newspaper war and his personal unpopularity; the population had reached over 51,000 for the whole of New South Wales, and the value of the total exports was £500,000.

The unpopularity of Governor Darling gave a factitious advantage to his successor, Sir Richard Bourke, even before his sterling qualities had become known. Sir Richard Bourke may be said to have been the real founder of our present free institutions, as under his rule the foundations of the Constitution we now enjoy were well and firmly laid, on the solid basis of full and equal rights to all, whatever their sect or belief, and whether emancipist or originally free. Immigrants began to arrive in large numbers, under a policy of assisted immigration which was then initiated. The first vote in aid of immigration was made by the Legislative Council at Bourke's suggestion, and the British Government doubled the amount given by the colony. Under that system the first batches of immigrants to arrive were fifty young women from an orphan school in Cork, and fifty-nine mechanics from Scotland, whom the Rev. Dr. Lang introduced for the purpose of building the Australian College.

But the great achievement of Sir Richard Bourke's administration was the establishment of religious equality, and the breaking up of the monopoly of Government aid enjoyed by one communion. For his services in the cause of liberty, in this and other instances, a movement was set on foot after his departure—which took place in 1837, twelve months after the passing of the Church Act—to erect a statue of him in Sydney. Mr. Westmacott was commissioned to design a figure of Sir Richard in bronze, which, together with a granite pedestal, arrived in Sydney in 1842. It was erected where it now stands, at the Macquarie-street entrance to the Domain, opposite to the Public Library, and was unveiled on the 11th April, 1842. A general holiday was proclaimed on the occasion, and the assemblage was the most numerous which had up to that time gathered, for any purpose, in the metropolis. The succeeding Governor, Sir George Gipps, delivered a speech, laudatory of his predecessor, in whose steps he said he was resolved to tread. This was the first statue ever set up in Australia. It was no more than a fitting tribute to the virtues of the Governor, and serves even now as a reminder of the new order of things which he introduced.

The famous expeditions of Sir Thomas Mitchell, who had su
Oxley as Surveyor-General, were undertaken during Bourke's t
office. The first was to the north, as far as Liverpool Plains
second, the country between the Bogan and the Macquarie was su
and in the third, the course of the Darling was traced, from it
to its junction with the Murray. In the fourth, Mitchell di
the rich lands of Victoria, which so enraptured him that he na
country Australia Felix.

The administration of Sir George Gipps was marked by the
of transportation. The system of assigning convicts as servant
settlers had ceased in 1838, and transportation itself was aboli
an Order in Council in 1840, though an attempt was made to r
nine years later. For many years previous to its abolition, the
of transportation was viewed with great disfavour by the colon
a powerful league was formed as early as 1830 to bring a
cessation. During the fifty-three years when New South W
open to receive British prisoners, the number of convicts who l
Sydney was about 82,250, of whom 70,040 were males and
females. At the census of March, 1841, there were in th
19,397 persons, 15,760 males and 3,637 females, originally b
free by servitude or emancipation; and 26,977 persons, 23,84
and 3,133 females, whose period of servitude had not expired.
therefore appear that out of the total number of convicts sent
colony, 46,374 remained at the abolition of the system of tra
tion, while 35,876 had either been removed by death or had
settlement.

The great event of Governor Gipps' time was undoubte
introduction of a new Constitution, by the establishment of a Leg
Council composed of thirty-six members, twelve nominated by the
and the remainder elected by those who were placed on the
roll, a small property qualification being required. The new
met on the 1st August, 1843.

A great commercial crisis followed soon after the introdu
the new Constitution, and was the cause of serious and wid
distress. An account of the causes which led up to this p
acute depression, and of the remedial measures, such as th
vency Act and the Lottery Bill, adopted to enable the co
weather the storm, will be found in the chapter dealing with
trial History."

The first agitation for the formation of the Port Phillip Distr
a separate colony took place in 1844, towards the close of G
Gipps' administration, and the claims of the trans-Murray resid
govern themselves were ably advocated by Dr. Lang, one
six members returned by the district since known as the co
Victoria. The entire population of what is now New South
Victoria, and Queensland did not, at that period, exceed

of which the Port Phillip District contained only 30,000. Their distance from the seat of government nevertheless justified the demand of the Victorians for separation, which was conceded, to their great permanent benefit, in 1851, seven years after the first agitation, and when the population of Victoria numbered 77,345. In December, 1859, New South Wales was again dismembered, losing its northern province, which was constituted a separate colony under the name of Queensland.

Sir George Gipps was succeeded as Governor by Sir Charles Augustus Fitzroy, during whose tenure of office occurred several of the most important events in the history of Australia. These, in the order of their happening, were the final abolition of transportation in 1849; the separation of Victoria in 1851; the discovery of gold in the same year; and the establishment of Responsible Government in 1855-6. The abolition of transportation was not accomplished without a severe struggle with the pro-assignment party, the details of which will be found in their proper place, under the head of "Industrial History."

The discovery of gold, in 1851, was by far the most important incident which had yet occurred in the annals of the country. An account of that remarkable event, together with its industrial and commercial results, will be found in its proper place, but a few remarks are here called for as to the historical bearing of the great discovery. For many years prior to 1851 it was known that small quantities of gold had been found in the Bathurst district; and a colonist offered, during the administration of Sir George Gipps, to conduct the Government surveyors to a spot where he said gold existed in payable quantities, but the project was discouraged. After a few years, however, when wages were low and work was scarce, the tale of a discovery of gold was suddenly on every tongue.

In the early part of 1851 nuggets began to arrive in Sydney. They had been found in the vicinity of Bathurst, and their inspection by the public raised a wave of excitement, which affected all classes. It is not surprising that the possibility of amassing a fortune in a few months—which seemed indisputable from the presence of so many specimens of gold—should have induced hundreds of people of all ranks to abandon their employments, and set out for Bathurst. Nor could news of such a nature be confined within the colony, and before many months had elapsed the presence of gold in Australia was known all over the world. Then, from every quarter of the globe, followed a mighty rush of the most enterprising spirits and those physically the most capable of enduring the unknown hardships before them—a circumstance on which Australians in the future will have occasion to congratulate themselves; for the splendid physique of the early colonists, already manifested in their sons and daughters, must undoubtedly become the inheritance of succeeding generations.

The effect produced on society by this most fortunat unpleasant enough at first. Stations throughout the c without hands, and all ordinary occupations were threa tinction, in consequence of the general exodus to the g squatters even petitioned the Government asking that m be proclaimed, and all gold-digging peremptorily prohi that the regular industrial pursuits of the country shou fered with. The Governor, however, refused to accede to absurd request. So great a change in the circumstances as that wrought within so short a time by the gold disco fail to affect many persons prejudicially. But after a fe resumed their normal course, and gold-mining found its the ordinary industries of the country. The great and pe which resulted from the influx of an enterprising populati of wealth, and the consequent development of many o cannot be overrated. Nothing since the introduction of w tended so much to develop its resources, and to make so wi great advantages which Australia offers to the overcrow of the Old World, as the discovery of gold in 1851. Si country's progress has been by leaps and bounds, and A was before regarded merely as a far-off dependency of now takes a place amongst the nations of the world, and of realising the prophetic visions of future greatness wh founders.

For several years before the discovery of gold there ha up among the colonists a strong desire for a larger n government. The position of the colony as a Crown de galling one, especially when the population became so la through the outbreak of the gold fever. It was fe system, which might have sufficed for the government when their numbers were few, was quite unsuitable community as New South Wales had become. Henc that had already been commenced in favour of a free C continued with ever-increasing force.

In 1851, an Act was passed by the Imperial Parliam Vic., No. 59), in accordance with which the dependency erected into a separate colony, and provision was ma Constitution upon New South Wales. Accordingly, in Committee of the Legislative Council was appointed Constitution for the colony, in pursuance of the po by the Act above cited. The first result of the Committee was the despatch of a remonstrance to th State for the Colonies, directed not so much a form of government, as against the amendment of t which it was proposed to introduce. Subsequently, respondence, and the receipt of a despatch from th the Colonies, Sir John Pakington, practically conc the colonists demanded, a Committee of the Legislative Council was appointed to draft the new Constitution. This Committee consisted of the following gentlemen:—Messrs. Wentworth, Deas-Thomson, James Macarthur, Cowper, Martin, Macleay, Thurlow, Murray, and Dr. Douglas.

The Committee, in their report, stated that they desired to have a form of government in perfect accordance with the British Constitution, and that a conservative element ought to be constantly present in the Constitution: and for this reason they declared they did not feel inclined to hazard the experiment of an Upper House based on the general elective franchise. To provide for this Upper House the Committee gravely made the following recommendations. They proposed that an hereditary nobility should be created, leaving the Crown to decide whether or not to give the first holder of a title a seat for life, and that the aristocracy to be thus established should, in the future, elect a certain number of their order to form the higher branch of the Legislature. The question of federation was also noticed in the report:—"One of the most prominent legislative measures required by the colony, and the colonies of the Australian group generally, is the establishment at once of a General Assembly, to make laws in relation to those intercolonial questions that have arisen, or may hereafter arise, among them. The questions which would claim the exercise of such a jurisdiction appear to be (1) intercolonial tariffs and the coasting trade; (2) railways, roads, canals, and other such works running through any two of the colonies; (3) beacons and lighthouses on the coast; (4) intercolonial gold regulations; (5) postage between the said colonies; (6) a general court of appeal from the courts of such colonies; (7) a power to legislate on all other subjects which may be submitted to them by addresses from the Legislative Councils and Assemblies of the colonies, and to appropriate to any of the above-mentioned objects the necessary sums of money, to be raised by a percentage on the revenues of all the colonies interested."

This report, when it was made public, caused a good deal of commotion in the metropolis, and at a public meeting, held at the "Royal Hotel," the following energetic protest against part of the scheme was adopted:—"That this meeting views with surprise and strong feelings of opposition the scheme proposed for the political constitution of the colony, especially in respect to the establishment of an Upper House of Crown nominees, and a certain unprecedented order of colonial nobility": and a further resolution decided that "a larger meeting should be held, in order to record a protest against a measure so repugnant to the feelings of British subjects, and fraught with so much danger to the political rights of the people." A more numerous meeting was accordingly held, the principal speakers at which were Mr. (afterwards Sir Henry) Parkes, Messrs. Robert Johnson, Montefiore, Deniehy, Mort, Piddington, Flood, and Archdeacon McEncroe.

In spite of these meetings, the Council proceeded to debate t
as it stood. After a great deal of opposition to the retent
"aristocratic" clause, and after the holding of more public
the "Constitution Act," the basis of the rights we now enjoy,
passed on the 21st December, 1853. This Act established tw
tive Chambers. The first was to consist of not less than t
natural-born or naturalised subjects (four-fifths of whom w
persons not holding any office of profit under the Crown) wh
be nominated by the Governor in the name of the Queen.
members were to hold their seats for five years, at the exp
which period all appointments were to be made for life. The
was to be appointed by the Crown. The Legislative Assemb
consist of fifty-four members, the qualification for the franc
fixed as follows:—All inhabitants of full age, being nati
naturalised subjects of the British Crown, and not having
victed of any crime—or, if convicted, pardoned—and havin
rates and taxes for which they were liable, were placed in the
precedent required for either voting or being elected to the
but they were required, in addition, to be qualified in the
respects:—As the owner of a freehold estate of £100; as a ho
lodging occupier, or leaseholder for three years at £10 per an
these were added boarders at £40 per annum, persons recei
a year salary, and pasture-license holders for one year. M
religion were declared incapable of being elected to the L
Subsequent alterations to the Constitution Act removed that r
and made universal manhood suffrage the basis of the electo
of the colony, with the application of the principle popularly
"one man, one vote." A full account of the parliamentary s
be found in the chapter of this work treating of "Constit
Government."

Before the Constitution could become operative, it was nece
the sanction of the British Parliament should be obtained, a
purpose Wentworth (whose name has become identified with th
ment of Responsible Government) and E. Deas-Thomson were
by the Council to proceed to England in order to do what la
power to facilitate the passage of the necessary measure. Ac
about the middle of the year 1855, an Act was passed by th
Parliament, empowering the Queen to assent to the Bill dra
the Council, and on the 19th December the new Constit
formally inaugurated by Governor-General Sir William
who had just succeeded Fitzroy, being sworn in afresh und
mission from the Queen, which revoked his former crede
appointed him "Governor-in-Chief" of New South Wales.
for the first Parliament were issued on the 22nd May of the
year.

With the enumeration of the events that led up to the in
of responsible government this narrative fitly closes. All tha

taken place has been treated, as far as possible, as belonging to statistics, and will be found dealt with in various places in other chapters of this volume.

SUCCESSION OF GOVERNORS.

The succession of Governors, from the foundation of the colony to the present time, is given in the following table:—

	From	To
Captain A. Phillip, R.N.	26 Jan., 1788	10 Dec., 1792.
Major F. Grose, New South Wales Corps (Lieutenant-Governor)	11 Dec., 1792	12 Dec., 1794.
Captain W. Paterson, N.S.W. Corps (Lieutenant-Governor)	13 Dec., 1794	1 Sept., 1795.
Captain J. Hunter, R.N.	7 Sept., 1795	27 Sept., 1800.
Captain P. G. King, R.N.	28 Sept., 1800	12 Aug., 1806.
Captain W. Bligh, R.N.	13 Aug., 1806	26 Jan., 1808.
During Governor Bligh's suspension—		
Major G. Johnston, N.S.W. Corps **Lieutenant**-Colonel J. Foveaux, N.S.W. Corps **Colonel** W. Paterson, N.S.W. Corps	26 Jan., 1808	28 Dec., 1809.
Major-General L. Macquarie	1 Jan., 1810	1 Dec., 1821.
Major-General Sir T. Brisbane, K.C.B.	1 Dec., 1821	1 Dec., 1825.
Colonel Stewart, 3rd Regiment (Acting Governor)	6 Dec., 1825	18 Dec., 1825.
Lieutenant-General Ralph Darling	19 Dec., 1825	21 Oct., 1831.
Colonel P. Lindsay, C.B., 39th Regiment, (Acting Governor)	22 Oct., 1831	2 Dec., 1831.
Major-General Sir Richard Bourke, K.C.B.	3 Dec., 1831	5 Dec., 1837.
Lieut.-Colonel K. Snodgrass, 52nd Regiment (Acting Governor)	6 Dec., 1837	23 Feb., 1838.
Sir George Gipps	24 Feb., 1838	11 July, 1846.
Lieut.-General Sir Maurice O'Connell, Commander of the Forces (Lieutenant-Governor)	12 July, 1846	2 Aug., 1846.
Sir Charles A. Fitzroy, K.C.B., K.H.	2 Aug., 1846	17 Jan., 1855.
Sir William Thomas Denison, K.C.B.	20 Jan., 1855	22 Jan., 1861.
Lieutenant-Colonel John F. Kempt, 12th Regiment (Administrator)	23 Jan., 1861	21 Mar., 1861.
The Right Honorable Sir John Young, K.C.B., G.C.M.G. Administrator	22 Mar., 1861	15 May, 1861.
Governor-in-Chief	16 May, 1861	24 Dec., 1867.
Major-General Sir Trevor Chute, K.C.B., Commander of the Forces (Administrator)	25 Dec., 1867	7 Jan., 1868.
The Right Honorable the Earl of Belmore, P.C.	8 Jan., 1868	22 Feb., 1872.
Sir Alfred Stephen, Knt., C.B. (Administrator)	23 Feb., 1872	2 June, 1872.
Sir Hercules George Robert Robinson, G.C.M.G.	3 June, 1872	19 Mar., 1879.
Sir Alfred Stephen, K.C.M.G., C.B. (Lieutenant-Governor)	20 Mar., 1879	3 Aug., 1879.
The Right Honorable Sir Augustus William Frederick Spencer Loftus, P.C., G.C.B.	4 Aug., 1879	9 Nov., 1885.
Sir Alfred Stephen, G.C.M.G., C.B. (Lieutenant-Governor)	10 Nov., 1885	11 Dec., 1885.
The Right Honorable Baron Carrington, P.C., G.C.M.G.	12 Dec., 1885	1 Nov., 1890.
Sir Alfred Stephen, G.C.M.G., C.B. (Lieutenant-Governor)	3 Nov., 1890	15 Jan., 1891.

	From	T
The Right Honorable the Earl of Jersey, P.C., G.C.M.G.	15 Jan., 1891	28 Fe
Sir F. M. Darley, Kt., Chief Justice (Lieutenant-Governor)	2 Mar., 1893	29 Ma
The Right Honorable Sir Robert William Duff, P.C., G.C.M.G.	29 May, 1893	15 Ma (died i
Sir F. M. Darley, Kt., Chief Justice (Lieutenant-Governor)	16 Mar., 1895	21 No
The Right Honorable Viscount Hampden, G.C.M.G.	21 Nov., 1895	6 Ma
Sir F. M. Darley, K.C.M.G., Chief Justice (Lieutenant-Governor)	7 Mar., 1899	(Still i

During Sir William Denison's term of office he made two Norfolk Island, the first extending from 17th September October, 1857; and the second, from 16th June to 8th July During his first visit the government was administered by H. K. Bloomfield, Mr. J. H. Plunkett, and Mr. Charles Cowp during the second, by Colonel J. M. Perceval, Sir William W. and Mr. Charles Cowper.

Earl Beauchamp, G.C.M.G., has been appointed to succee Hampden as Governor of the colony.

LIMITS AND AREA.

THE Colony of New South Wales lies almost entirely between the 29th and 36th parallels of south latitude, and between the 141st and 153rd meridians east of Greenwich. It is bounded on the east by the Pacific Ocean, to which it presents a coast-line extending over 700 miles, from Point Danger at its north-eastern extremity to Cape Howe at the south-east. From the point last mentioned, which is also the north-east limit of the colony of Victoria, it is bounded by an imaginary line, running in a north-westerly direction to the source of the Indi, a stream rising at the foot of Forest Hill, a few miles south of the Pilot Mountain, one of the most conspicuous peaks of the Australian Alps. The southern boundary of the colony follows the course of the Indi, and afterwards of the Murray, into which the first-named stream ultimately merges, as far as the 141st meridian of east longitude. The intersection of the Murray with this meridian forms a common point of the three colonies of New South Wales, Victoria, and South Australia.

On the west, the colony is separated from South Australia by the line of the 141st meridian, as far as its intersection with the 29th parallel of south latitude, at which point New South Wales, South Australia, and Queensland touch. Commencing at this point, the northern boundary of the colony follows the 29th degree of latitude, till it is crossed by the Macintyre River, one of the upper branches of the Darling, not far from the 149th meridian. Thence it follows the course of the Macintyre upward, to the junction of its tributary, the Dumaresq; leaving the Macintyre, it follows the tributary stream till it meets a spur extending from the Main Dividing Range to the junction of Tenterfield Creek and the Dumaresq. The boundary runs along this spur until it joins the main range, thence, almost parallel to the coast, it follows the Dividing Range to Wilson's Peak, where the Macpherson Range branches eastward. Following the last-named range, the northern boundary reaches the coast at Point Danger.

The area comprised within these limits is estimated at 310,700 square miles, or 198,848,000 acres, being a little over two-and-a-half times that of Great Britain and Ireland. Excluding the surface covered by rivers and lakes, the area would be 195,882,150 acres, or about 306,066 square miles.

The length of the colony, from Point Danger on the north to Cape Howe on the south, is 680 miles. From east to west, along the 29th parallel, the breadth is 760 miles, while diagonally from the south-west corner, where the Murray passes into South Australia, to Point Danger, the length reaches 850 miles.

PHYSICAL CONFIGURATION.

THE surface of New South Wales is divided naturally into th distinct zones, each widely differing in general character physical aspect, and clearly defined by the Main Dividing Range, wh traverses the country from north to south. The table-land, which fo the summit of this range, comprises one of the zones above mentio and marks the division between the coastal region, forming the east watershed, and the great plain district of the interior.

MOUNTAINS, TABLE-LAND, ETC.

The Main Dividing Range runs almost parallel to the coast, at great distance from it. On the eastern edge of the table-land th mountains rise abruptly to a height which averages between 2,000 3,000 feet, while on the western side they slope gradually towards th great central plain. The geographical centre of the whole moun system of south-eastern Australia lies in the south-eastern portion New South Wales, close to the confines of Victoria. Here some of th peaks rise to a height of over 7,000 feet above the level of the Mount Kosciusko and Mount Townsend, two of the highest peaks of th Australian Alps, attain an elevation of 7,328 feet and 7,260 fe respectively.

The central plateau, which these heights dominate, becomes divided into several branches, marking the watershed of three distin river systems. The eastern watershed extends throughout the whol length of New South Wales and Queensland, and drains into the Pacif Ocean. The western watershed, embracing a portion of the thr eastern colonies, is drained by the river system of the Murray an Darling into the Southern Ocean. In the southern watershed the Snow River has its source, its upper basin being entirely in New South Wal although its waters flow through Victoria and enter the sea near Poi Ricardo, south west of Cape Howe.

In the south-eastern portion of the colony, which has the appearan of having been convulsed by some great physical disturbance, the widt and altitude of the table-land are greatest. The mountains, howev are rugged and their slopes abrupt, as is also the case in other po tions of the Dividing Range, particularly in the Blue Mountains an the eastern parts of New England. The average height of the Snow and Muniong Ranges, which belong to the south-eastern district, reach 5,000 feet; and the width of the plateau, in the direction of east a west, may be set down at 100 miles. The altitude of the Monaro district averages 2,000 feet above the sea-level ; but as the table-land runs northward it decreases greatly in height and in width, until it narrows to a few miles only, with an elevation of scarcely 1,500 feet.

The table-land rises again at the Blue Mountains, where the principal summits attain a considerable elevation, Mount Beemarang reaching 4,100 feet. The general level of the plateau itself will be best understood when it is remembered that the Great Western Railway of the colony traverses a district in these mountains, of which all stations from Leura to Rydal, a distance of 46 miles, are situated at an elevation of over 3,000 feet, or within a few feet of that height. The dividing chain again decreases gradually in its spread northward of the Blue Mountains, until, as a comparatively narrow ridge, it divides the waters of the Goulburn and the Hunter, on the eastern slope, from those of the Namoi and the Castlereagh, on the western. The mass once more widens out in the Liverpool Ranges, where Mount Oxley stands conspicuous at a height of 4,500 feet, whilst still farther north Ben Lomond reaches 5,000 feet, and the table-land maintains an average altitude of 3,000 feet, giving to this district, although situated at no great distance from the tropics, the climate and aspect of much higher latitudes.

Narrow valleys and deep gorges everywhere break the continuity of the Dividing Range. Such is especially the case in the Blue Mountains, where the scenery is of striking and characteristic grandeur. The table-land everywhere presents one strange peculiarity. The level land suddenly terminates, and many hundred feet below, as far as the eye can reach, wooded valleys extend, whose undulating floors are walled in by sandstone cliffs, of height so enormous as to be without parallel elsewhere in the world. At the bottom of these valleys small rivulets and tiny streams, fed by waterfalls from the table-land, trace their way, under an ever-verdant dome of graceful tree-ferns and giant eucalypti.

The mountain scenery of this part of New South Wales produces on the traveller an entirely new impression. Here are no snow-capped peaks upon which the rising and setting sun produces strange and magnificent colour effects, nor does any peculiar shape of the summits strike the imagination, as in the Alps and Pyrenees of the Old World. On the contrary, from the plains the New South Wales mountains look rather insignificant. But gazing from the edges of the high table-land into the deep valleys below, the mind is awed by the realisation of the magnificent scale on which Nature has worked in these solitudes. In many places the cliffs rise 2,000 feet perpendicularly from the valley beneath, and the hills at their feet, formed by the accumulation of debris from their sides and from the plateau above, appear as slight undulations. The valleys and sides of the gorges, wherever there is soil, are clothed with dense vegetation, and over all is the mantle of blue haze which makes the whole effect most striking, and which has given to the range visible from Sydney its appropriate name.

The main range throws off many spurs towards the sea on t slope. These divide the waters of the numerous rivers which the Pacific Ocean. Almost everywhere between the coast rang sea the country is hilly and serrated, more particularly in the portion of the colony. In the Illawarra district, 50 miles to of Sydney, the mountains skirt the very edge of the coast, p towards the ocean a perpendicular face of cliffs nearly 1,00 height. Farther north there is a wider coast-land, with greater of country available for tillage and pasture.

The western slope is entirely different. Numerous ramific the general mountain system are thrown off, but all slope gentl the great central plain of the interior. So gentle, indeed declivity that the dividing lines of the various watersheds extend westward are scarcely visible, being only indicated by sion of low ridges and isolated elevations.

In the extreme west of the colony, verging on South another mountain system exists, forming the western ed immense depression, through which the largest rivers of the A Continent hold their devious course. The Barrier and t Ranges are part of this system. They consist of low hill rising to the dignity of mountains, and culminating in a fe peaks, such as Mount Arrowsmith and Mount Lyell, which a elevation of only 2,000 feet above sea-level.

Traces have been found of the existence at some earlier p range of primary rocks, extending from Orange to Cobar and W and forming the watershed between the Lachlan and part of of the Darling. The range no longer exists as a landmark, f to denudation it has almost entirely disappeared.

The whole mountain system of New South Wales lies b limit of perpetual snow. On the south-eastern slopes of th Ranges, however, and on the summits of the high peaks of the A Alps, snow sometimes lingers throughout the year.

Lakes of the Mountain Region.

On the summit of the Main Dividing Range, and within a of the inland towns of Goulburn, Queanbeyan, and Braidwoo the principal lakes of the colony are situated. Lake George is in length and 6 miles in width, draining a basin whose area 490 square miles. It is situated at an elevation of 2,200 feet sea, and the scenery around it is very beautiful. This lake ex phenomenon of a large drainage area without a visible o though it receives many small water-courses, no stream leaves Bathurst, a few miles east of Lake George, is another depr the summit of the Dividing Range, and covers in ordinary area of about 15 square miles. It is similar in character to Lak having no outlet to the sea. Both lakes, in periods of great shrink considerably in area; but Lake George in most seasons is a fine sheet of water, and now that the railway to Cooma skirts its shores, the attractiveness of its scenery makes it a favourite resort of tourists.

THE COASTAL REGION—RIVERS.

The main range already described, traversing the country from north to south, gives rise to numerous rivers flowing into the South Pacific. Compared with the western rivers of the colony, those of the eastern slope appear insignificant enough; but contrasted with the principal rivers of western Europe, their relative size and importance are at once manifest.

In the extreme north of the colony, the Tweed and Brunswick Rivers flow through a rich country of semi-tropical aspect. Their courses are short, and bar-entrances render them navigable only for small craft.

A few miles south of the Brunswick, the Richmond descends from the heights of the Macpherson Range, on the slope of Mount Lindsay, one of the highest peaks of the northern table-land. The river has three branches, and is navigable on the main arm as far as Casino, 62 miles, and on Wilson's Creek to Lismore, 60 miles from the sea. The Richmond drains an area of about 2,400 square miles of country, rugged in its upper basin and heavily timbered, and in its lower course flowing through rich alluvial land, where the produce of semi-tropical climes grows luxuriantly.

Immediately south of the last-named stream is the Clarence—the largest river on the eastern watershed. It takes its rise in a spur of the Main Dividing Range, and runs in a south-easterly direction for 240 miles, carrying a considerable body of water through one of the richest districts of the colony, and emptying itself into the Pacific at Shoal Bay. The upper part of its basin is very rugged, so much so that its principal tributaries, the Mitchell, Nymboi, Timbarra, and Orara Rivers, rising in the New England table-land, between Armidale and Tenterfield, all flow in an opposite direction to the course of the main stream, generally trending to the north-east, and even, in the case of the Orara and the Nymboi, to the north-west. The Lower Clarence is a magnificent stream, averaging half-a-mile in width, from its mouth upwards, for nearly 50 miles, and it is navigable for 67 miles, as far as Copmanhurst. Ocean-going steamers of large tonnage ascend the river as far as Grafton, 42 miles from the sea. The area of country drained by the Clarence is over 8,000 square miles, or nearly half as large again as the basin of the Thames, whose course, although about as long as that of the Clarence, is navigable for only 60 miles.

Two short rivers, the Bellinger and the Nambucca, both navigable for some distance by small craft, enter the Pacific between the Clarence and Trial Bay.

Into Trial Bay, the Macleay, one of the principal rivers of the coast, discharges, after a course of 200 miles from its source near Ben Lomond.

With its principal feeders, the Guyra, the Apsley, and the
the Macleay drains an area of 4,800 square miles of country,
part of which, especially that portion through which the Apsle
extremely rugged and precipitous. Series of waterfalls, some
have a perpendicular descent of over 200 feet, mark the cours
stream, as it runs through narrow gorges whose sides rise in p
height of about 2,000 feet. In its lower course the valley wi
considerably into magnificent alluvial plains, fast becoming th
a numerous and thriving population. The Macleay is navigabl
than 30 miles, as far as the town of Greenhills, a few mil
Kempsey. The country through which it flows is for the
thickly timbered.

The Hastings is the next stream met with, emptying itself
sea at Port Macquarie. The country which it drains is rich, un
and densely wooded, and the area within its watershed is 1,4
miles. Its chief arm is formed by the Wilson and Maria
the left bank, the latter joining the main stream a few mil
Port Macquarie.

The Manning rises in the Main Dividing Range, and flo
due east through a prosperous district, rapidly becoming settl
valley through which it flows is densely wooded, and the ag
land on both sides of the river is unsurpassed for fertility.
ning has a length of 100 miles, and, like most of the rivers o
board, its course lies through undulating country, broken in
portion, but widening out as it nears the sea. Its chief tribut
Barrington, on the right bank; on the left, it receives the
River, the Dawson, the Lansdowne, the Nowendoc, Rowley
and other small streams. The Manning is navigable for oc
vessels as far as Wingham, about 20 miles from its mouth.

Before reaching the Hunter, several small streams are
amongst which may be mentioned the Wollomba and Maclea
into Wallis Lake; the Myall, which empties into Myall Lake
Karuah, which reaches the ocean at Port Stephens.

The Hunter is one of the chief rivers of the colony, an
source in the Liverpool Range. It flows first in a southerly
until its confluence with the Goulburn; thence it takes an
course, and reaches the sea at Port Hunter, on the shores of
situated the city of Newcastle. The Hunter receives numer
taries. The chief of these, in addition to the Goulburn, alre
tioned, are the Wollombi, the Paterson, and the Williams.
tributaries, the Hunter drains a country extending over 11,0
miles—an area more than twice as large as the basin of the
The river is navigable for ocean-going vessels as far as Morpeth,
from the sea; whilst the Paterson and the Williams are both
the one for a distance of 18 miles, and the other for 20 mi
upper courses of the main river and its branches are throug
not mountainous districts; but its lower course is mainly thro

sandy, alluvial flats. Through its lower course, the river drains the largest and most important coal-field in Australia, whose emporium is Newcastle, the second city of the colony in shipping and commerce. The length of the Hunter is over 200 miles.

Though less important than the Hunter, from a commercial point of view, the Hawkesbury, which reaches the sea at Broken Bay, is none the less one of the finest rivers of the eastern seaboard. It is formed by the united waters of many streams, each of considerable local importance. Its chief tributaries come from the table-land or gorges of the Blue Mountains, but the principal branch of the river itself rises in the main range, farther south. The range forming the watershed between the Hawkesbury and the streams flowing eastward, leaves the main range near Lake Bathurst, runs north-easterly, and terminates at the sea near Coalcliff.

Under the name of the Wollondilly, the Hawkesbury has its source not many miles from Goulburn. Flowing past that town, it proceeds in a northerly direction until it receives the waters of the Cox River, which come from the Blue Mountains, after passing through wild gorges, wherein may be found some of the most magnificent scenery in Australia. From the junction of the Cox River the stream is known as the Warragamba, which name it retains until its junction with the Nepean. This river rises in the coast range overlooking Wollongong, and together with its tributary streams, the Cataract and Cordeaux, forms the source of the water-works from which Sydney now draws its supply. Though smaller than the Warragamba, the Nepean gives its name to the united waters of the two streams. After receiving the Nepean, the river flows along the foot of the Blue Mountains, through a rich valley highly cultivated. From the Blue Mountains it is augmented by the waters of two streams, the Grose and the Colo, and from the junction of the latter the river is called the Hawkesbury. Still running northward, it is joined by the Macdonald, an important stream, navigable for some distance above its confluence with the Hawkesbury. The Macdonald comes from the north, and joins the river on the left bank. After turning to the east, the Hawkesbury holds its course through broken country, the scenery of which has been pronounced equal to any other river scenery in the world, and finally reaches the sea at Broken Bay. Its course extends over 330 miles, and the drainage area may be set down as 8,000 square miles. Navigation is possible as far as Windsor, 70 miles from the mouth, and a little dredging would enable sea-going vessels to reach that town.

In the neighbourhood of Sydney, some small streams fall into Botany Bay. Two of these, the Woronora and George's River, have their sources on the eastern slope of the ranges in which the Nepean, Cordeaux, and Cataract rise, and after rapid courses unite their waters before falling into the bay.

Generally speaking, the rivers south of Sydney are of less importance than those to the north, as the width of the coastal strip narrows considerably. The Shoalhaven, nevertheless, merits more than p notice. Rising in the coastal range and following the direction coast, it flows northerly through deep gullies, marked by magn scenery peculiarly Australian ; then turning sharply to the east, it the alluvial plains, which are counted amongst the richest and mo ductive in the country. The Shoalhaven is 260 miles in length, navigable only for a few miles, and drains a district 3,300 miles i Farther south, in the narrow belt between the ranges and the sea the Clyde, Moruya, Tuross, and Bega Rivers. They all pass th rich, undulating, agricultural country, and each has an average of 60 to 70 miles. The Towamba River, at the extreme south colony, empties itself into the Pacific at Twofold Bay.

The physical aspect of the eastern rivers is much the same, upper course being amidst broken and mountainous districts, and lower waters flowing through undulating country with rich alluvi along their banks, for the most part highly cultivated. Where u vated, the country is densely covered with timber, some of which a a magnificent growth, yielding the finest hardwood, and, in the cedar and pine.

Though belonging to another river system, the upper basin Snowy River is situated in New South Wales. This river receiv snow-fed streams rising on the southern slopes of the Monaro I its principal tributaries being the Bombala and the Eucumbene. Snowy River and its tributaries water a considerable portion highest table-land of the colony, between the mountain ranges of are found large tracts of arable land, where the produce of colder may be grown to perfection. After leaving New South Wal Snowy has a rapid and tortuous course, and finally enters the sea be Cape Howe and Bass Straits, in the colony of Victoria. The a its watershed in New South Wales is about 2,800 square miles.

Harbours and Ports.

With a coast so extensive as that of New South Wales, it wou natural to expect many harbours and bays affording outlets for th duce of the country, and such is the case. Besides harbours of comm importance, there are others which afford shelter for vessels in st weather, and a refuge in time of danger. Fortunately, howeve bours of refuge are not often required. The coast of the colony is larly free from cyclones, hurricanes, and like visitations. Gal certainly not unknown, and casualties are not infrequently recorde the coast is very safe, and in many cases disasters are to be attrib causes which ordinary prudence could have averted.

Inside Cape Byron, in the north of the colony, the bay of th name offers shelter, in all but north-east weather, to vessels tra Queensland. A large pier has been constructed, by means of wh produce of the neighbouring districts of the Brunswick and Twe be shipped when an entrance to these rivers is impracticable.

oal Bay, the entrance to the Clarence, the anchorage is safe modious, and when the works designed for improving the river are completed, it promises to be one of the best ports on the coast. Bay, at the mouth of the Macleay, affords ample shelter and horage. The Government have erected a large prison on the hill ing the Bay, and are now utilising the prisoners' labour in ting a breakwater, with the view of making Trial Bay not only ir of refuge, but a shipping port. When this design is accom- there is every reason to suppose that it will become one of the quented places on the coast, as the resources of the Macleay are great and are rapidly developing.

Macquarie, at the mouth of the Hastings, and the harbour at near Cape Hawke, afford good anchorage. Port Stephens, a ther south, offers at all times the most safe and commodious desirable. As a natural port it is hardly inferior to Port , and the scenery of its shores is very beautiful. At present ephens is little used, owing to its proximity to Newcastle and parseness of the population in its immediate neighbourhood.

ty miles farther south is Port Hunter, at the mouth of the river name. When first used, the harbour was inconvenient and some- ngerous; but this has been altered entirely by the breakwaters ining-walls which have been constructed. Newcastle harbour afe and roomy, with shipping facilities equal, if not superior, to und in any other Australian port. Magnificent wharves line its provided with hydraulic and steam cranes of the most modern The length of wharf frontage is more than two miles, the trade and increasing, and the city ranks third amongst Australasian . The importance of Newcastle is mainly due to the existence nse coal deposits in its neighbourhood, which supply not only Australian colonies, but the China seas, the Pacific slopes of ted States, and the countries bordering on the Spanish main. , too, large shipments of wool have been made direct to English Newcastle having direct communication by railway with the n districts of the colony.

r miles farther south is Lake Macquarie, in the centre of the d of the Newcastle district, and covering an area of 44 square The great drawback to the lake as a shipping port has been the ness of its entrance; but extensive dykes and training-walls have mmenced, which have already increased the draught of water in nnel, and with some further improvements Lake Macquarie will an important shipping place.

en Bay, 15 miles north of Port Jackson, forms the mouth of the Hawkesbury. It has a bold entrance, and on Barranjoey, the n headland, is erected a fine lighthouse. The bay has three s, Brisbane Water being the northern, the Hawkesbury mouth tre, and Pittwater the southern arm. The first-named opens a series of lakes, and the town of Gosford, standing at the head of one of them—the Broadwater—is the centre of an i district. The scenery at and around Broken Bay is charact Australian, and in natural beauty rivals even Sydney Harbou of Broken Bay the coast-line is a succession of high cliffs a beaches.

The entrance to Port Jackson lies between perpendicular cliff stone several hundred feet high, and only 74 chains, or nearly apart. Sydney Harbour has been too often described to lengthy reference here. It holds the first place amongst the of the world for convenience of entrance, depth of water, an shipping facilities. Its natural beauties charm all who visit i and in the quiet waters of its numerous bays and coves t of the world might securely rest. The area of water surfac harbour proper is 15 square miles, and the shore-line is 165 circuit. At the South Head is erected a splendid lighthou with an electric arc light, the power of which is only exceede or three lights in the world. On the shores of Port Jackso Sydney, the capital of New South Wales and the mother ci Australias. The city and its suburbs occupy 142 square miles, within their boundaries about 417,000 people.

Botany Bay, the first port entered by Captain Cook, the disc this territory, lies a few miles south of Sydney. It covers an a square miles, and receives the waters of several small rivers. has very little trade, by reason of its proximity to Sydney, frequented by craft in search of shelter during stress of weathe

Wollongong, Kiama, and Ulladulla are small harbours which h snatched, as it were, from the sea, and are important shipping

About 80 miles to the south of Sydney the coast is broke important inlet called Jervis Bay. Its entrance is 2 miles w on its bosom safe anchorage may be found in any part. It is su by rich agricultural and mineral country, as yet unexploited. has been so bountiful to the country as a whole that particular undoubtedly rich, must remain for a while undeveloped, a which would in older countries be prized for their conveni capacity here remain unused, save as refuges in stormy weathe

Bateman's Bay, at the entrance to the Clyde, is an inlet importance, and coastal steamers also load produce at the mout Moruya, Tuross, and Bega Rivers.

Twofold Bay is a magnificent sheet of water, near the south of the colony. Formerly it was the seat of a large whaling trade, now, however, all but extinct. It is well sheltered, and a fine jett ample shipping facilities. Its trade is chiefly with the neig colonies, in produce and live stock, the bay being the nearest the sea-coast for the rich district of Monaro. A railway is pl connect the port with the table-land and the metropolis, and Bay promises to become a considerable shipping place in the n On its shores is situated the town of Eden.

Besides the ports and harbours, properly so called, which have been enumerated above, there are several lakes, or arms of the sea, which will, with the development of the resources of the country, become ports of shipment. From Cape Hawke a chain of lakes extends to Port Stephens, communicating with the latter through the Myall River, and covering a large area. The most extensive of these are Wallis Lake, Myall Lake, and the Broadwater. The country round about is richly timbered, but its resources are still undeveloped. Between Lake Macquarie and Broken Bay is Tuggerah Lake, also an extensive sheet of water. South of Wollongong is Lake Illawarra, of considerable area, but shallow, and towards the south of the colony are Coila and Tuross Lakes, into which the Tuross River discharges.

ISLANDS.

No islands of any note belong geographically to New South Wales. The Broughton Islands, lying a few miles northward of the Heads of Port Stephens, are the largest in extent. Solitary Island, situated near the northern part of the coast, between the Bellinger and Clarence Rivers, and Montagu Island, 18 miles south-east of the Moruya River estuary, have been selected as sites for lighthouses, but are not otherwise important. Norfolk Island, having an area of 8,607 acres, has recently been placed under the administration of the New South Wales Government; and Lord Howe Island, 3,220 acres in extent, and lying some 360 miles off the coast, in the latitude of Port Macquarie, belongs politically to the colony.

WESTERN WATERSHED.

The western watershed of the colony is, in its physical features and geographical character, the antithesis of the eastern. Instead of a narrow strip of country shut in by the sea and mountains, and intersected by numerous short rivers with a rapid flow, the western watershed forms a vast basin through which the quiet waters of a few great rivers have their long though uncertain courses. The rivers of the western region all belong to the fluvial system of the Murray, which carries to the Southern Ocean, through the colony of South Australia, the drainage of a watershed immense in extent, embracing the northern portion of Victoria and the western and larger part of New South Wales, and reaching almost to the centre of Queensland.

The Murray, or Hume, the southern branch of this vast river system, rises in the Snowy Mountains, from which its three principal sources, the Hume, the Tooma, and the Indi descend. The first two of these streams rise on the northern and western slopes of Mount Kosciusko; the Indi, which is really the main river, has a longer course, rising in a gully near the Pilot Mountain, at an elevation of 5,000 feet above the sea. From the confluence of these rivers the Murray rapidly descends towards the plains below Albury, where it is only 490 feet above sea-level, with a course of 1,439 miles still to run. From Albury downwards the river receives many tributaries on both l from New South Wales being the most important. Above tributaries are for the most part mountain torrents, carr main stream the melted snows of the Australian Al lower course, however, the Murray is augmented, through t bidgee and the Darling, by the waters of secondary systems as its own.

Before being joined by the Murrumbidgee, the Murray r a series of ana-branches, the drainage of a large portion of lying between the two main streams. The Billabong Creek through the centre of the plain spreading between the Murrumbidgee; in the middle of its course it communicat latter river, through Colombo and Yanko Creeks, whilst o it feeds the Murray by the channel of the Edward River. itself is an important stream. With the Wakool, Tupal, a Creeks, and many other smaller and less important w it forms a fluvial system, interlacing the whole country fro to the Murrumbidgee junction, which has justly been name The Edward and Wakool are together navigable for over far as the important town of Deniliquin. From its farth the foot of the Pilot Mountain to the town of Albury, the a length of 280 miles; thence to the Darling River juncti is 852 miles; and from that point to the sea, below Lake it is 587 miles in length. The river has thus a total cou miles, of which 1,250 are within the colony of New Sout has been navigated as far as the Ournie gold-field, abo above Albury, and 1,590 miles from its mouth.

The Murrumbidgee has its source at the foot of a hill ove Coolamon Plains, at a height of nearly 5,000 feet above course first shapes itself southward, but near the town of C a sharp curve and runs in a northerly direction until it app Here it curves again, trending to the west in a line pa Murray; but turning south-west on receiving the Lachl joins the main river after a course of 1,350 miles. The are the Murrumbidgee is estimated at 15,400 square miles. I part of its course it receives from both sides numerous river the most important of which are the Umaralla, Molong Rivers on its right, and the Goodradigbee and Tumut I left bank. All these flow through mountainous country of plateaux, which from the Coolamon and Coorangora to the plains round Gundagai and Wagga successively height from 5,000 feet to 720 feet and 607 feet above the s

The upper valleys, both of the Murrumbidgee and the of similar physical aspect. Both rivers are snow-fed, the greater extent than its tributary, owing to the higher ele mountains and plateaux from which it descends. In the they are also similar in character, and the plains which th the most fertile in the colony. With an intelligent system of servation and irrigation, the lower valleys of these rivers would , large population of agriculturists on land hitherto devoted o sheep pasturing.

ief tributary of the Murrumbidgee is the Lachlan, rising in the iding Range, where its principal feeders also have their source. e the Boorowa, Crookwell, Abercrombie, and Belubula—all eams, occasionally swollen by melted snow from the table-fter receiving the Boorowa, the Lachlan flows to the Murrum-hrough 500 miles of plain country, without receiving any of a permanent character. The water-courses which carry off as water from the rich plains on each side of the river, only in time of flood. The total length of the river is 700 miles, asin has an area of 13,500 square miles. The country drained achlan is similar in most respects to that of the Murray and bidgee, and with regular rainfall or irrigation the light red soil y loam of its lower valley would yield abundant returns to the The lines of demarcation between the Lachlan basin and that rrumbidgee on the south and of the Darling on the north-west, y perceptible on the ground, so flat is the country through ese great rivers flow.

the tributaries of the Murray, the Darling drains the largest ending as it does over the greater portion of the western of New South Wales, and embracing nearly all Southern nd. From its confluence with the Murray at Wentworth up action with the Culgoa a few miles above Bourke, the Darling only two tributaries, the Paroo and the Warrego, both inter-though of vast size in times of flood. For over 1,000 miles t river holds its solitary course, Nile-like, feeding the thirsty the south with water falling many hundred miles distant on is of Queensland. The course of the river is tortuous in the in many places a narrow neck of land, a mile or two across, parts of the river 20 miles distant if the stream were followed. ling presents the phenomenon, not uncommon in Australian banks much higher than the plain behind; indeed, the river , though from 30 to 40 feet beneath the bank, is in some places below the general level of the country. Successive floods ed to the height of the banks, and have raised the bed of the rrespondingly.

arling has no source under that name, which applies only to of the river as far as the Bogan junction. Above this point he name of the Barwon, until its confluence with the Gwydir; s known as the Macintyre, and afterwards the main branch the name of the Dumaresq. The last-named stream has its the Dividing Range, on the summit of the table-land at the ex-th-east of the colony, not far from the head of the Richmond. aresq, Macintyre, and Barwon form, however, what might really be called the Upper Darling, and this appellation woul graphically accurate. The variety of names by which, not Darling, but many other Australian rivers are known, is du fact that they were discovered in sections, the identity of w not established until years afterwards, and the sectional na survived.

The Darling receives, in its upper course, many tributaries, wh the southern portion of Queensland, but these rivers only flow fo part of their courses in New South Wales. Chief among ther Mooni, Narran, Bokhara, Culgoa, Warrego, and Paroo. The affluents of the Darling within the boundaries of New South V on the left bank. The Gwydir, Namoi, Castlereagh, Macqu Bogan are the most important. These streams are all of con length and similar in character; their upper valleys are on t lands, and their lower courses lie through alluvial plains a pastoral country. The Darling is navigable, in times of freshe as the township of Walgett, 1,758 miles from its confluence Murray; thence to the sea the distance is 587 miles, making a tot of navigable water from Walgett to the sea of 2,345 miles therefore ranks high amongst the rivers of the world, as estir navigable length. Unfortunately, however, its upper course only during part of the year.

If the fluvial system of the Murray and Darling and their tributaries be considered in the light of the facilities it affords carriage, its value will appear not inconsiderable. The Darlin may be made available for navigation for 1,758 miles, from W to Walgett; the Murrumbidgee and Lachlan combined have 9 and the Murray, from Ournie gold-field to the point where it e territory of South Australia, has a length of 1,120 miles. If t added the navigable length of the Wakool and Edward, the total of river which could be navigated reaches nearly 4,200 mile western district alone—a length more than 50 per cent. grea that of the railways of the colony.

Here and there along the course of the western rivers are fou sometimes of considerable dimensions. These lakes are in realit depressions, receiving water from the overflow of the rivers in flood, and in return feeding them when the floods have subside Urana is the most important in the Murray and Murrumbidg and Lakes Cowal, Cudgellico, and Waljeers, in that of the Along the Darling are Lakes Poopelloe and Gunyulka on the l and Laidley's Ponds and Lakes Pammaroo, Tandou, and Caw the right, near Menindie. On the South Australian frontier Victoria, formed by the overflow of the Murray, and other importance. The area of these lakes is undefined, as they va according to the rainfall, sometimes covering a vast extent of and at other times being reduced to the proportions of mere w whilst in seasons of great drought they are absolutely dry.

CLIMATE.

It is accepted as an ascertained fact that the temperature of lands in the southern hemisphere is lower than that of countries situated in corresponding latitudes north of the equator. To this general law New South Wales is no exception. The researches of the Government Astronomer of the colony conclusively confirm this, and show, from the records of temperature, extending over many years, that the climate of New South Wales is one of the most temperate and uniform anywhere experienced.

Just as the country is divided naturally into three distinct geographical regions, so it is separated into the same climatic divisions, each of which has its characteristic features. The coastal region extends from 28° to 37° south latitude, and if the temperature accorded with that of similar latitudes in the northern hemisphere, Casino and Grafton would resemble the country bordering on the Gulf of Suez, in the Red Sea; Delhi, in India; Ningpo, in China; and New Orleans, in the United States. Such, however, is not the case. Casino has a mean temperature of 67·8°, only 2·0° more than that of Messina, in Sicily, which lies more than 9° farther from the equator. Eden, which is situated at the extreme south of the colony, in latitude 37°, has a mean temperature of 60·3°, which is practically the same as that of Nice and Rome-places respectively 466 and 339 miles farther removed from the equator. And not only is the climate of the coastal region milder than the corresponding latitudes in the northern hemisphere, but the range of temperature is not so great. This is a very important factor in estimating the healthiness of a country.

As regards Sydney, situated as it is midway between the extreme points of the colony, in latitude 33° 51′ south, the same truth is apparent. Its mean temperature is 63°, and corresponds with that of Barcelona, the great maritime city of Spain, and of Toulon in France, the former being in latitude 41° 22′, and the latter, in 43° 7′ N.; while the range is only 17° Fahrenheit, calculated over a period of 39 years, the mean summer temperature being slightly under 71°, and that of winter 54°. At Naples, where the mean temperature for the year is about the same as at Sydney, the summer temperature reaches a mean of 74·4°, and the mean of winter is 47·6°, with a range of 27°. Thus, the summer is warmer and the winter much colder than at Sydney. The highest temperature in the shade ever experienced in Sydney was in 1896, when 108·5° in the shade were registered; and the lowes temperature recorded was 35·9°, giving a range of 72·6°. At the range has been as great as 81°, the winter minimum fallin times below the freezing point.

Taking the coast generally, the difference between the mean and mean winter temperature may be set down as averaging r than 24°—a range so small as to be but rarely found elsewhe famed resorts on the Mediterranean sea-board bear no comparis the Pacific slope of New South Wales either for natural salu for the comparative mildness of the summer and winter, w epidemics and pestilences which have devastated those regions o civilisation have never made their appearance on these shores.

Passing from the coast to the table-land, a distinct climatic entered. On the high southern plateau, at an elevation of 4,6 stands the town of Kiandra, having a mean summer temper 56·4°, and a winter temperature of 32·5°, corresponding with Dunfermline, in Scotland, in latitude 56° 5′ N., while Kiand 35° 52′ S. Cooma, in the centre of the Monaro plains, at an e of 2,637 feet above sea-level, enjoys a summer as mild as either or Paris, while its winters are far less severe. On the New] table-land, the climate of Armidale and other towns may be co as nearly perfect as can be found. The yearly average temper barely 56·4°; while the mean summer temperature only reaches 67 the winter temperature falls to 44·2°, a range approximating c that of the famous health resorts in the south of France.

The climatic conditions of the western districts of the co entirely different from those of the other two regions, and ha often cited as disagreeable. Compared with the equable temper the coastal district or the table-land, there may appear some just for such a reputation, but only by way of comparison. The climat great plains, in spite of the heat of part of the summer, is very healt an inspection of the death-rates, of both children and grown which are given elsewhere, amply bears out this view. The Bourke may be taken as an example. Seated in the midst of t plain of the interior, it illustrates peculiarly well the defects, as the excellences, of the climate of the whole region. Bourke has the same latitude as Cairo, yet its summer temperature is 1·5° l that of the Egyptian city. New Orleans also lies on the same but the American city is 4° hotter in summer. As regards temperature, Bourke leaves little to be desired. The mean reading of the thermometer is 54·5°, and accompanied as this is skies and an absence of snow, the season is both refreshing a able. The great heat experienced on occasional days in summ the thermometer reads considerably over 100° in the shad accompanied by that moisture in the air which at the sea-c make a less degree of heat almost unbearable.

three great meteorological divisions into which New South turally falls, the coastal district embraces an area of 38,200 iles; the table-lands, an area of 84,900 square miles; and the district, an area of 187,600 square miles. The last-named rom its size and variable rainfall, be split into two districts 146° of east longitude as an arbitrary division. The coastal has an average rainfall of 41·71 inches. In this district e several stations close to the ocean which are subject to al and varying rainfall. Amongst these may be mentioned quarie and the Clarence Heads, the first having a mean annual ·58, and the latter of 57·73 inches; while at Newcastle and he respective figures are 48·44 and 49·66 inches; and at Eden, e southern extremity of the colony, the average fall is only hes. On the table-lands the rainfall averages 33·02 inches; however, a small area at the southern portion of the table-lands high average of 63·76 inches is experienced. West of the s the amount of the fall decreases as the distance from the creases, and in a large area west of the Darling the average infall is less than 10 inches. For the whole area of the western he average does not exceed 20·42 inches. The mean rainfall ony for the last twenty-five years was about 25 inches, but this hardly be taken as conveying any meaning, except, perhaps, he greater part of the colony to be favoured with but a fall.

owing table shows the average rainfall at some of the principal which are arranged in the order of their latitude, in each of divisions :—

on.	Least distance from the East Coast in miles.	Mean annual Rainfall in inches.	Station.	Least distance from the East Coast in miles.	Mean annual Rainfall in inches.
Coastal District—Area, 38,200 square miles.					
	28	45·88	Windsor	30	33·02
	13	58·13	Emu	36	32·55
eads	0	57·73	Parramatta	16	38·42
	22	39·46	South Head	0	48·59
arie	0	63·58	Sydney	5	49·66
	10	49·70	Liverpool	18	38·73
	78	24·78	Picton	22	30·03
ok	68	23·94	Bulli	0	51·72
	40	31·23	Wollongong	0	43·24
ns	53	24·46	Nowra	6	39·88
	15	44·48	Cape St. George	0	59·10
and	18	35·09	Moruya Heads	0	38·30
ns	0	57·38	Bodalla	7	38·41
	1	48·44	Bega..	8	33·55
	26	35·95	Eden	0	35·77

Station.	Least distance from the East Coast in miles.	Mean annual Rainfall in inches.	Station.	Least distance from the East Coast in miles.	Mean annual Rainfall in inches.
Table-lands—Area, 84,900 square miles.					
Tenterfield	80	34·86	Armidale	81	32·66
Inverell	124	32·05	Eversleigh	78	32·66
Glen Innes	90	34·84	Walcha	83	31·20
Bundarra	113	30·68	Goonoo Goonoo	110	27·05
Quirindi	115	29·28	Young	140	27·57
Murrurundi	94	32·76	Mittagong	27	39·96
Cassilis	120	24·92	Moss Vale	31	40·11
Mudgee	121	27·00	Murrumburrah	126	26·36
Orange	124	38·93	Crookwell	81	33·29
Bathurst	96	24·54	Goulburn	54	26·41
Forbes	176	21·11	Yass	92	26·24
Kurrajong	35	52·65	Lake George	53	28·58
Mount Victoria	61	37·67	Queanbeyan	60	23·95
Katoomba	58	63·50	Kyamba	134	31·14
Carcoar	111	31·30	Kiandra	88	63·76
Springwood	42	42·92	Cooma	52	19·99
Cowra	126	27·87	Bombala	37	24·63
Western District, East of 146° East Longitude—Area, 87,800 square miles.					
Moree	204	25·15	Nyngan	269	21·02
Warialda	162	29·98	Cannonbar	272	18·69
Bingara	153	32·57	Dubbo	177	23·36
Brewarrina	345	18·23	Condobolin	227	19·82
Walgett	286	20·17	Marsdens	187	20·19
Narrabri	193	27·17	Wagga Wagga	158	22·99
Gunnedah	156	27·07	Urana	213	17·96
Coonabarabran	185	31·92	Albury	175	29·05
Western Plains, West of 146° East Longitude—Area, 99,800 square miles.					
Milparinka	605	9·38	Wentworth	478	12·09
Bourke	386	16·88	Hay	309	15·14
Wilcannia	473	11·36	Euston	422	12·48
Cobar	345	17·02	Deniliquin	287	16·97
Mount Hope	296	17·48	Moama	290	17·19

From the standpoint of health, it is fortunate for the country that di ness is one of its characteristics; otherwise, instead of being the abo of health, the interior of the colony would, with abundant rains, b become an impenetrable jungle, the lurking-place of those malarial f which devastate so many fair regions of the Old World and A New South Wales may, therefore, be compared favourably with a of the world; and, taking into consideration the comparatively lo tudes in which it is situated, it offers a most remarkable ve temperate climates. From Kiandra, on the highest part of t Dividing Range, to Bourke, on the great interior plain, the cli ıpared with that of the region of Europe extending from Edin- to Messina, but more generally resembling that of southern e and Italy. It may, therefore, be regarded as peculiarly fitted e habitation of people of European race, embracing, as it does, ı its limits, the climatic conditions under which the most advanced of the world have prospered. The following tables, showing the ȝe meteorological conditions of the places given in the preceding fairly represent the whole colony :—

Station.	South latitude.	East longitude.	Altitude.	Mean.				Highest reading of thermometer in shade.	Lowest reading of thermometer in shade.
				Yearly temperature in shade.	Summer temperature in shade.	Winter temperature in shade.	Daily range of thermometer in shade.		
	Coastal District.								
	° ′	° ′	feet.	°	°	°	°	°	°
. ...	28·50	153·00	82	67·8	77·0	57·0	25·3	116·4	24·6
e	28·50	153·21	52	69·7	78·1	59·5	21·0	108·2	28·2
ce Heads	29·28	153·21	122	69·0	76·0	60·6	15·6	104·8	37·4
n	29·43	152·56	40	68·5	77·1	58·1	26·0	118·0	20·9
lacquarie.........	31·25	152·54	49	64·2	72·1	55·2	16·8	98·2	30·4
....	31·58	152·29	30*	65·6	74·8	55·1	20·2	112·6	24·0
....	32·04	150·53	680	62·2	74·4	49·3	22·0	114·2	22·2
llbrook	32·17	150·53	475	64·5	76·7	51·6	25·2	117·6	20·0
on	32·34	151·09	135	65·0	76·4	53·3	19·2	109·2	22·0
Plains............	32·35	150·55	150*	66·5	76·6	54·6	22·0	107·9	30·2
th	32·46	151·37	20	62·7	72·9	51·9	20·6	102·7	26·0
Maitland	32·47	151·35	40	64·1	74·7	52·8	20·0	109·9	24·0
tephens	32·49	152·09	30*	64·2	72·0	55·5	19·5	104·2	30·6
stle	32·55	151·50	34	64·6	72·4	55·5	16·3	107·5	31·3
own	33·34	150·53	40*	64·1	74·5	52·5	20·2	113·0	27·2
or	33·36	150·49	58	64·5	74·6	52·9	26·1	113·9	21·5
....	33·46	150·40	87	62·8	73·4	51·0	17·7	107·6	29·8
atta................	33·49	151·02	49	62·0	70·5	52·3	20·8	104·2	20·9
r	33·51	151·13	146	63·0	70·8	54·0	13·6	108·5	35·9
ool	33·58	150·59	50	59·8	70·8	48·2	20·5	106·0	22·0
....	34·09	150·36	549	59·4	69·5	48·1	22·5	111·7	19·7
....	34·18	150·58	54	63·0	69·1	55·8	18·7	99·7	34·6
gong	34·25	150·56	54	62·8	70·0	54·8	17·2	113·4	31·9
....	34·55	150·38	30	62·9	70·3	54·4	21·9	110·3	31·6
t. George	35·12	150·45	175	61·7	69·2	53·8	14·6	105·2	25·5
Heads	35·53	150·06	50	61·6	68·6	53·6	18·5	113·8	31·1
....	36·04	149·59	40	59·8	68·4	49·8	25·1	114·1	18·6
....	36·38	149·53	50*	60·3	69·3	50·2	23·9	115·6	16·6
....	37·00	149·59	107	60·3	68·0	52·0	13·9	106·0	29·3
	Table-lands.								
ield	29·05	152·04	2,827	59·3	69·8	47·2	25·0	107·1	12·0
l	29·48	151·10	1,980	60·1	73·1	46·0	23·5	108·6	13·4
nes	29·48	151·44	3,518	58·4	69·2	46·1	26·1	107·3	14·4
ra	30·14	151·10	2,000*	59·9	69·4	48·0	23·9	96·5	17·5
le..................	30·32	151·38	3,333	56·4	67·7	44·2	24·7	105·2	13·9

* Approximate heights.

GEOLOGICAL FORMATION.

THE geology of the colony has been ably treated by various lear scientists, and this work has been added to by the late Mr. C Wilkinson, Government Geologist, and by Mr. E. F. Pittman, successor in that office. To the Rev. W. B. Clarke we are indeb for the first systematic classification of the various sedimentary form tions found in New South Wales. The original classification, howev has been somewhat modified, and the rocks, as they are now known, classified as follow :—

- *Cainozoic*..
  - Post Tertiary
    - Recent.
    - Pleistocene.
  - Tertiary ......
    - Pliocene.
    - Miocene.
    - Eocene.
- *Mesozoic* ...
  - Cretaceous...
    - Upper Cretaceous—Desert Sandstone.
    - Lower Cretaceous—Rolling Downs Formation.
  - Jurassic.
  - Triassic—Hawkesbury Series
    - Wianamatta Shales.
    - Hawkesbury Sandstones
    - Narrabeen Shales.
- *Palæozoic*..
  - Permo-Carboniferous
    - Upper Coal Measures.
    - Dempsey Beds.
    - Middle Coal Measures.
    - Upper Marine Series.
    - Lower Coal Measures.
    - Lower Marine Series.
  - Carboniferous.
  - Devonian.
  - Upper Silurian.
  - Lower Silurian.

PALÆOZOIC PERIOD.

Palæozoic rocks extend throughout almost the whole eastern porti of the colony, principally on the western watershed of the main Dividin Range, in the country where the Murrumbidgee, Lachlan, and Abe crombie Rivers rise. They appear on the eastern watershed, along par of the coast near Bateman's Bay, and, striking inland, are found in th basin of the Clyde, and the upper valley of the Shoalhaven. In 189 slates containing Lower Silurian fossils (graptolites) were found at tw localities in New South Wales—on the border of Victoria, to the sout and south-west of Delegete ; and at Myall Reefs, near Tomingley.

The *Upper Silurian* rocks extend as far north as Mudgee, where the are overlain by the Permo-Carboniferous strata of the Hunter Valle and by the belt of volcanic rocks extending along the Liverpool Rang They reappear farther north, in the upper valley of the Macleay Rive

slope, and in the basin of the Namoi, on the west of the
nge. The Silurian rocks consist, of sandstone, slate, and
d exhibit evidence of metamorphism, particularly in the
nd Bathurst and Hill End. Limestone beds, of considerable
scattered throughout this formation. These are chiefly
crinoids and corals which outcrop prominently in the
District, near Molong and Gulgong, at Tuena, and also in the
gee District. In the limestone formations are found mag-
s, such as the Wellington, Wombeyan, Fish River or Jenolan
gonia and Abercrombie, the fame of which has spread
the confines of Australia. The caves at Yarrangobilly, in
district, are also very attractive.

nian rocks are well seen at Mount Lambie, near Rydal,
te Mr. C. S. Wilkinson measured a section of strata showing
f not less than 10,000 feet. They also occur in the northern,
d western districts.

oniferous rocks.—The coal-bearing rocks are of three
ems, the first of which is, in all probability, of lower car-
ge. Two seams, the one 5 feet and the other 7 feet in
cur near the top of this system, but the coal in both cases
ds, and otherwise too dirty to be of any economic value.

o-Carboniferous rocks.—The second system, known as
arboniferous, contains many seams of workable coal, which
eveloped in both New South Wales and Queensland. Pro-
measures occur in this system in three horizons in New
: the first and lowest of these is the Greta (Stony Creek)
cond the Tomago (East Maitland) series, and the last and
he Newcastle series. The total thickness of this system
iated strata at Newcastle is about 11,000 feet, containing a
ess of about 150 feet of coal, without taking into account
than 3 feet in thickness. Borings at Cremorne, a point on
margin of Sydney Harbour, as well as at Holt-Sutherland
ol, have confirmed the anticipations of the Rev. W. B.
Mr. C. S. Wilkinson as to the continuous extension of
upper or Newcastle series of coal-seams between Newcastle
and Bulli on the south.

Mesozoic Period.

sic rocks.—The third system comprises the Clarence Carbon-
, and is of Mesozoic age. Professor David estimates the
t part of it which contains the principal seams to be about
n east to west, while its width is about 37 miles from north
he most remarkable beds in the Clarence basin are a series
whitish sandstones, which were considered by Mr. C. S.
be the equivalents of the Hawkesbury sandstones, and
by him "The Middle Clarence Series," occupying as they
ediate position between the upper and lower coal-beds of

the basin. None of the seams in this coal-field has as yet been to be of commercial value. Professor David estimates the top contain 1 foot 9 inches, out of a total thickness of 5 feet 7½ in coal fit for ordinary consumption, while the second and third sea not yet been sufficiently tested to allow of a definite opinio formed of their value. It is probable, however, that even if th prove to be of insufficient thickness and purity to yield coal purposes of export, they may supply sufficient coal of fair qu local requirements, especially if it be washed in suitable machin as Lührig's.

The Hawkesbury and Wianamatta series, which overlie the iferous formation of that part of the country through which the I bury and its principal tributaries flow, belong to the Mesozoic It is in this series that the wonderful gorges of the Blue Mo and the beautiful harbours of Port Jackson, Port Hacking, and Bay, occur. The rocks consist of grey, purple, and chocolate shales, and yellowish-grey sandstones, and the maximum thic the strata is estimated at 1,700 feet. The Triassic rocks f principal store-house of the artesian water supply of the north portion of the colony, where they underlie the Rolling Downs o Cretaceous formation. Most of the deeper bores in this ari obtain the bulk of their supply of water from the Triassic sand

The Wianamatta formation extends round Sydney, and covers in the shape of an irregular triangle, the angular points of whic Picton on the south, Richmond on the North, and Sydney on The beds are composed of fine sedimentary deposits of argillaceou and are of comparatively little thickness. They appear to ha deposited in hollows worn by denudation out of the sandstone o they directly rest. Neither the Narrabeen shales, nor the Haw sandstones, nor the Wianamatta shales contain any remarkabl of coal. All three formations are intersected by dykes of which have also intruded the underlying Permo-carboniferou and where they have come in contact with the coal-seams, th have been converted into coke, sometimes to a thickness of or more.

Jurassic rocks have been recognised in only one locality in Ne Wales, viz., on the Talbragar River, about twenty miles n Gulgong, where they occupy a denuded hollow in the Haw sandstones. They are of small extent, and consist of yellowis containing numerous fish and plant remains.

The *Cretaceous* formations occupy the north-western part of th extending from the Barwon westward towards the north-wes Water-bearing strata have been reached at depths varying from to 2,070 feet, and large quantities of water have been obtained, principally from the underlying Triassic sandstones. The exis subterranean water throughout this extensive region has been pr demonstrated, and it remains for the settlers to avail themselve

ith which nature has charged her reservoirs in the ages that
g since been counted out. The steps already taken in regard
ng the artesian water are described below.

CAINOZOIC PERIOD.

is period belong the deposits covering the greater portion of the
nd western districts of the colony. It therefore embraces the
of the great western rivers and their chief tributaries. The
n is, however, intersected by a broad broken belt, chiefly of
rocks, extending across its centre, from the Bogan River towards
t Barrier Range on the farther side of the Darling. Large
of Devonian rocks are also met with in the same region.
these deductions, the *Post-Tertiary* rocks cover more than one-
the whole colony. The vast alluvial plains were formed during
cene and Post-Pliocene periods. The alluvial deposits are of
thickness, sometimes shallow ; but in the great plains, between
n rivers which intersect the country, the deposits are of very
pth.

IGNEOUS AND METAMORPHIC ROCKS.

rea occupied by these rocks comprises one-eighth of the colony—
cipal rocks belonging to the series consisting of varieties of
quartz-porphyry and felstone, diorite, basalt, and serpentine.
occurs for the most part in the northern and southern masses
Great Dividing Range, but is found outcropping throughout
rian deposits, which cover so large a part of the centre of the
Diorite and basalt occur principally in the country between
leay and Manning Rivers, and on both slopes of the Liverpool
between the upper waters of the Namoi and Macleay. Serpentine
l scattered in different parts of the colony, chiefly at Gundagai,
, Lucknow, Nundle, Yulgilbar on the Clarence River, and Port
rie. The granites, quartz-porphyries and felstones have been
ed as belonging to the Palæozoic age ; whilst the volcanic rocks,
and others are chiefly contemporaneous with the tertiary series.
ma there is an immense development of interbedded basalt lavas
s in the Permo-Carboniferous rocks.

ARTESIAN WATER.

e actual boring operations proved that the belief was well
l, it had long been scientifically demonstrated that there was
robability of water being obtained in the Cretaceous formation
underlies the whole of the north-west portion of New South
—a region favoured with only a sparse rainfall ; and from an
tion which has lately been made of this formation occurring in
tern and north-western portions of the colony, it is considered
e that the artesian water-bearing basin will be found to extend
rther south than it was previously supposed to do. It may,
be yet found to extend approximately along the course of the lower

Darling, and possibly below the Tertiary rocks of the north-we portion of Victoria, and part of South Australia.

It was not until 1879 that artesian boring was attempted in South Wales. In that year operations were begun at Kallara, a st lying between Bourke and Wilcannia. The supply was tapped depth of 140 feet, and the effluent water rose to a height of 26 In 1884 the Department of Mines put down its first bore in sear water, a small supply of which was reached at 89 feet. Since much work has been done, both by the Government and by pr enterprise. Recently an important discovery was made by the Go ment Geologist of the colony, namely, that artesian water is obtai in other than Cretaceous rocks. This is borne out by palæontol evidence, and some of the most successful bores, such as tho Coonamble, Moree, Gil Gil (Moree to Boggabilla), and Euroka (W to Coonamble) have pierced rocks of Triassic age, corresponding the Ipswich coal-measures.

On the 31st October, 1898, there were 68 completed Govern bores, while 8 were in progress, and contracts had been let for o Of those completed, there are 44 flowing, yielding a supply of ap mately 25,000,000 gallons per diem, and 17 from which a sup 750,000 gallons per diem can be pumped; but in the remaining 7 the search for water suitable for drinking purposes has been unsucce The deepest bore sunk in the colony is that at Dolgelly, on the from Moree to Boggabilla, which is down 4,086 feet, yielding a fl 745,200 gallons per diem. The next in depth is the Bancanya on the Silverton-Cobham Road, being 3,600 feet deep. The larges has been obtained at the Euroka bore, on the road from Walg Coonamble, which yields approximately 3,000,000 gallons per dien

The water from the Government bores, over and above that req for travelling stock and domestic use, is being used for irrig purposes, and much has already been accomplished in this dire At the Pera bore, 8 miles from Bourke, on the Wanaaring Roa area of 68¾ acres has been reserved for an experimental farm. remainder of the land has been cut up into 20-acre blocks, a which have been let under the homestead selection provisions o Crown Lands Act of 1895. Good results have attended the of irrigation at this place, as well as at other bores, especially tho the Bourke to Barringun Road. Farms will shortly be open at bore, Woollabra bore (Moree to Narrabri), Tenandra bore (War Coonamble), and Euroka bore (Walgett to Coonamble), where the l being surveyed for special lease in small areas, to which water w delivered from the bores by the Government. At each place a c area will be reserved for experimental cultivation. Further refere this subject will be found in the chapter on "Agricultural Produc

There are, in addition to the Government bores, 111 com private bores, which yield an aggregate supply of 40,000,000 g per diem.

FAUNA.

Mammals

present time, mammals are represented in Australia by the notremes, the Marsupials, a dog, and many rats and bats, as well marine aquatic animals—whales, seals, and the dugong.

onotremes, which are confined to Australia, Tasmania, and inea, comprise the duck-billed platypus (*Ornithorhynchus* and the native porcupines (*Echidna* and *Proechidna*). The -the "mallangong" and "tambrit" of the aboriginals— ustralia and Tasmania, and is one of the most interesting nown. The male is much larger than the female, and may be hed by the horny spur on the hind foot being of very large total length of the male is 24 inches, while the female seldom inches. In colour, the platypus is of a deep brown above, greyish or yellowish white below, the fur being close and The muzzle is produced into a broad, flattened beak, which is uring life with a delicate and sensitive skin; the tail is well , broad and flattened; and the feet are modified into swimming e five toes being extensively webbed; while the teeth, which those of any other existing mammal, are shed early in life, being taken by a series of horny plates. As a mammal, the s chiefly interesting because of the fact that it lays eggs. white in appearance; usually two in number, although three four are sometimes laid at one time; and in texture they are the eggs produced by reptiles. When hatched, the naked and oung are nourished on their mother's milk, as in the case of als. The nest of the platypus is formed at the end of a burrow, eached by two openings—one above and the other below the the water.

hidnas are also egg-laying, but differ from the platypus in that s carry their two eggs in a pouch, where they are hatched by th of the body. The common echidna (*E. aculeata*) is sed by having the fur thickly mingled with spines, which conceal the hair beneath. The muzzle is produced into a drical beak, which during no period is known to possess teeth; ably adapted to protect and assist the worm-like extensile The feet are stout, unwebbed, and furnished with five powerful he tail is short and conical. Several species have been described, but modern zoologists are inclined to consi geographical varieties. Regarded thus, the echidna range eastern New Guinea, throughout Australia, to Tasmania. T which are generically named *Proechidna* are distinguished only three toes on each foot, and by having a much cu great length. Two species are known, both of which ar New Guinea.

The marsupials, to which class belong the great majority mammals, are distinguished by the young being produced in imperfect state of development, and nurtured frequently i nal pouch for a lengthy period. In bush districts it is a c that the young are produced on the teat; this, howe erroneous, for they are born in the usual manner and after to the teat by the mother. Australia is the great home c pials, but they also occur in Tasmania and New Guinea, a flown into neighbouring islands. In America marsupials a but there they are represented by a single family—the The habits and conditions assumed by the marsupials are They are divided into seven families, namely, the *Macropo* *geridæ*, and *Phascolomyidæ*, constituting the sub-order of so named from the fact that the animals included possess c teeth in the lower jaw; and the *Peramelidæ*, *Dasyuridæ*, and *Didelphyidæ*, constituting the sub-order of Polyproto guished by having six or more such teeth.

1. *Macropodidæ*.—This family includes the kangaroos, kangaroos, and rat kangaroos. The kangaroos are so well they do not require more than a passing notice. They var the great grey kangaroo (*Macropus giganteus*), as large as little musk kangaroo (*Hypsiprymnodon moschatus*), which concealed in the pocket. Their hind limbs are very long, sion is chiefly effected by hopping, the long tail meanwhil balancer. The tree kangaroos of Queensland and New among the most notable of the family, climbing tall trees, most slender branches. Less frequently observed upon the the others, their limbs are more equal in length.

2. *Phalangeridæ*.—Under this name are included th opossums, the flying opossums, the flying mouse (one of marsupials), and the clumsy native bear—all tolerably well-

3. *Phascolomyidæ*.—The wombats, of which there are are heavily-made, short-limbed animals. They excavate h in the ground, and feed upon grass and other herbage. Australia and Tasmania.

4. *Peramelidæ*.—The bandicoots, found in Australia and are assigned to three genera—*Perayale*, *Perameles*, an Members of the first-named are known as rabbit bandicoot while the second genus includes the true bandicoots, who

bits are sufficiently well known. The pig-footed bandicoot (*Chœropus stanotis*) is generically separated on account of the unique and peculiar ructure of the four feet, which have a striking resemblance to those the pig.

5. *Dasyuridæ*.—The animals included in this family are the marsu- ial carnivora, so to speak, and are familiar as native cats (*Dasyurus*) nd pouched mice (*Phascologale* and *Sminthopsis*). These forms occur Tasmania, New Guinea, and adjacent islands, as well as in Australia. he most formidable of the group are the Tasmanian tiger or wolf *hylacinus cynocephalus*) and the Tasmanian devil (*Sarcophilus ursinus*), which are confined at the present day to the colony indicated.

6. *Notoryctidæ*.—The recent finding of a mole-like animal in Australia s one of the most interesting discoveries of the day. The marsupial mole is in no way connected with the European mole, but nevertheless as acquired many similar habits—affording a valuable lesson in arallelism in development. It is known only from central South ustralia.

7. *Didelphyidæ*.—These are the true opossums, and being confined to merica, need not be further mentioned here.

Dogs and seals form the carnivora of Australia. The dog family '*anidæ*) is represented by the dingo, or native dog (*Canis dingo*), lled by the aboriginals "worregal"; dingo being only the aboriginal me for the domestic dog introduced by Europeans. The native dog ound in all parts of the Australian mainland, and will inbreed with domestic dog, crosses being common throughout the settlements. It uestionable whether the dingo is indigenous, or whether it has been oduced from abroad. It was undoubtedly acclimatised before the ival of the first white settlers. The dingo does not bark, its temper ntractable, and it works great havoc among the flocks of the settlers.

he *Rodentia* finds representatives in many species of native rats, the e typical ones of which belong to the genus *Mus*, and the Jerboa-like ns to the genus *Conilurus*. The familiar water rat is known as *dromys chrysogaster*.

he *Chiroptera* are well in evidence, and include the flying-foxes and y insectivorous bats. The common flying-fox (*Pteropus poliocephalus*) et with in the brush lands, but it haunts the neighbourhood of ns during the fruit season, making great depredations among the ards and gardens.

f seals (*Pinnipedia*), the species found off the coast of New South les are the Australian sea bear or eared seal (*Otaria Forsteri*), and sea leopard (*Ogmorhinus leptonyx*), the former being a sociable and latter a solitary species.

mong other mammals belonging to New South Wales, or found iguous to its coasts, are representatives of the orders Cetacea and nia, the first comprising whales, porpoises, and dolphins; and the second, manatees and dugongs. Whales have always haunted coasts of the colony, and formerly a brisk trade was carried on in oil whalebone, Twofold Bay, about 208 miles south of Sydney, being chief seat of the industry. Among the whalebone-whales which inh our waters may be mentioned the Southern right whale (*Balæna austr* the pigmy whale (*Neobalæna marginata*), and the Sulphur-bot (*Balænoptera Huttoni*); while of sperm whales there are the gig *Physeter macrocephalus*, *Mesoplodon Layardi*, and *Kogia breviceps*. dolphin of our waters, commonly called "porpoise," is not disting able from the common and cosmopolitan form, *Delphinus delphis*. order Sirenia is represented by the dugong (*Halicore dugong*), but now seldom seen south of Moreton Bay. Its flesh is highly value the natives, and its oil is a good substitute for cod-liver oil.

Besides those already mentioned, geological research has brough light the remains of numerous extinct species of gigantic mamm The largest fossil marsupial, the *Diprotodon australis*, an herbivo monster, was as large as the rhinoceros, and related to the native or the wombat. Its bones have been found distributed gene throughout eastern and southern Australia. Fossil remains of anc large marsupial, the *Nototherium*, named by the late W. S. Macleay *Zygomaturus*, have also been found, as well as of a member of the fa of the *Phascolomyidæ*, or wombats, and of a marsupial rodent-like ani named the *Sceparnodon*. In the bone-breccia of the Wellington V Caves were found the bones of gigantic kangaroos (*Macropus titan*), w have been placed in the genera *Palorchestes*, *Procoptodon*, *Protemno* and *Sthenurus*; besides those of the *Thylacoleo carnifex* and the *Thylacinus*. The Wellington Valley Caves have also yielded f remains of a "porcupine" (*Echidna*) and a platypus (*Ornithorhync* belonging to the order Monotremata.

REPTILES AND BATRACHIANS.

First among the reptiles may be mentioned the snakes. Alth there are very many species of both venomous and harmless sn yet there are only about five which are actually harmful. The de snakes of the colony are as follow:—

1. The black snake—*Pseudechis porphyriacus*.
2. The brown snake—*Diemenia textilis*.
3. The tiger or brown-banded snake—*Notechis scutatus*.
4. The superb or copper-headed snake—*Denisonia superba*.
5. The death adder—*Acanthophis antarctica*.

To these should be added several sea snakes not infrequently f on the coast. Nearly all of these are highly venomous.

The largest of the harmless species are true pythons, known as the diamond and carpet snakes (*Python spilotes*). Of tree snakes the commonest is *Dendrophis punctulatus*.

Lizards may be said to swarm. The goanas, of which the *Varanus varius* attains a length of 6 feet or more, are the largest kind. Other familiar forms are the blue-tongued lizards (*Tiliqua scincoides* and *T. nigro-lutea*), the Jew-lizard (*Amphibolurus barbatus*), the water lizard (*Physignathus Lesueurii*), and the spiny lizard (*Egernia Cunninghami*). The best-known gecko is the rock gecko (*Gymnodactylus platurus*), a harmless, though curious, little creature, much feared by those ignorant of its nature.

The tortoises are semi-aquatic, and belong to the genera *Chelodina* and *Emydura*. Although two species of crocodile frequent the rivers of Queensland, they are fortunately absent on the New South Wales side of the border.

Of Batrachians, there are neither newts nor salamanders on the continent, but of frogs there is an immense choice, the tree frogs (*Hyla*) and the swamp frogs (*Limnodynastes*) being the most familiar forms.

Birds.

Few countries can boast of a greater variety of beautiful birds than New South Wales, all the more important orders and families of the class Aves being represented in the fauna of the colony. In the Australian continent and the adjacent islands no less than 770 species of birds have been discovered, some of which are especially interesting, and among these may be mentioned the lyre-bird (*Menura superba*), the satin bower-bird (*Ptilonorhynchus violaceus*), the fawn-breasted bower-bird (*Chlamydodera cerviniventris*), and the tooth-billed bower-builder (*Scenopœus dentirostris*); the mound-building mallee-fowl (*Lipoa ocellata*), the mound-building brush-fowl (*Talegallus Lathami*), and the collared plain-wanderer (*Pedionomus torquatus*). Many of the Australian birds, besides being beautifully plumaged, are no mean songsters, and others again are possessed of remarkable powers of mimicry and ventriloquism.

The order Accipitres is well represented in New South Wales, twenty-six out of the twenty-eight species inhabiting Australia being found in the colony. The largest of all our birds of prey is the wedge-tailed eagle (*Aquila audax*). In many parts of the colony this fine bird is included in the list of noxious animals and birds, in consequence of the destruction which it causes amongst lambs, but in the dingo and rabbit infested districts it is protected by land-owners on account of the effectual service which it renders in keeping these pests in check. Another useful bird is the black-breasted kite (*Gypoictinia melanosternon*), frequenting the inland districts. As many as thirty rabbit skulls have been found under a nest of a pair of these birds containing young. The white-bellied sea

eagle (*Haliaetus leucogaster*) and the white-headed osprey (*Pan*
leucocephalus) frequent the bays and inlets of our coast, while sev
species of hawks, eagles, harriers, kites, and a kestrel are found in
The sub-order Striges, or nocturnal birds of prey, is represented by
species. Chief among these are the great owl of the brushes (*At*
strenua) and the sooty owl (*Strix tenebricosa*), found in the co
districts.

The order Psittaci is especially numerous, and includes many beau
species of cockatoos, parrots, parrakeets, and lorikeets. Among
larger species are the white and black cockatoos, yellow and
crested; and the grey pink-crested gallah. The parrot family is
especially strong, some of the most notable members being the love-b
(*Melopsittacus undulatus*), the green parrot, and many kinds of lo
all gorgeously plumaged.

The order Picariæ, which embraces swifts, kingfishers, cuckoos,
includes one very remarkable specimen, viz., the great kingfisher, gob
or laughing-jackass, so called from its extraordinary mocking laugh.
is one of the most valuable of birds, being the determined enemy
persistent destroyer of small reptiles. The mopoke, or boobook
(*Podargus strigoides*), is also a characteristic member of this o
which includes the owlet night-jar, the dollar bird, and several sp
of kingfishers.

The order Passeres comprises swallows, crows, rifle-birds, honey-ea
finches, pittas, etc. This is the largest order of birds in Austr
and the finest, if not the most beautiful, family is the *Menuridæ*.
South Wales possesses a handsome species of this remarkable Austr
bird, called from the shape of its tail the lyre-bird (*Menura superba*),
is to be found chiefly in the fern gullies and brush-forests of the col
To the order Passeres belong also the crow-shrikes of the genera *Crac*
and *Gymnorhina*, the beautifully-plumaged regent birds (*Seric*
melinus), whip-birds (*Psophodes crepitans*), swallows, martins, dian
birds, fly-catchers, fan-tails, wedge-bills, thick-heads, robins—red-cap
red-breasted, and yellow; "superb warblers," emu-wrens, mea
pipits, bristle-birds, grass, crimson, and painted finches; pittas, gro
thrushes, bower-builders, cat-birds, rock-warblers, and honey-e
(*Meliphagidæ*). Worthy of special notice in this large order of b
are the bower-builders. Three species of these extraordinary
interesting birds are found in the colony. The brilliantly-plum
regent-bird (*Sericulus melinus*), which forms the most primitive b
or playing-place, frequents the dense coastal brushes of the nort
rivers; the satin bower-bird (*Ptilonorhynchus violaceus*), is foun
the scrubs and mountain-ranges of eastern New South Wales; and
spotted bower-bird (*Chlamydodera maculata*), inhabits the grassy p
and lightly-timbered country inland. Scattered about the entranc
the bowers of the last two species are pieces of bleached bone,
shells, bright feathers, bits of looking-glass, coins, or any bright o
which the birds may pick up in the bush.

order Columbæ is largely represented in the colony, especially in eat primæval forests of the coast districts. In the cedar brushes Liverpool Range white-headed fruit pigeons are very numerous; the brush-forests of the Clarence, the Richmond, the Macleay, llawarra, the top-knot and large-tailed pigeons, and the wonga- (*Leucosarcia picata*), so prized for its large size and the white- nd delicacy of its flesh, are very plentiful. The bronze-winged (*Phaps chalcoptera*), is common to almost all parts of the colony. l species of these birds are remarkable for their beautiful ge, their size, and the excellence of their flesh. One of the finest the partridge bronze-winged pigeon (*Geophaps scripta*), is found exclusively in the plains of the interior. Doves are also numerous, ost of the species are extremely delicate and beautiful. The little dove of the inland districts (*Geopelia cuneata*) is the prettiest en of this family.

game birds found in the colony belong to the orders Gallinæ emipodii. The former is represented by the wattled talegallus *allus Lathami*), found in the northern coastal scrubs and contiguous ain ranges, and the mallee fowl (*Lipoa ocellata*), inhabiting the districts. Both of these birds belong to the family *Megapodiidæ*; re mound-raising birds, and deposit their eggs in a scraped-up f leaves, decaying vegetable matter, and sand. To this order also the stubble quail (*Coturnix pectoralis*), the swamp quail (*Synoicus is*), and the king quail (*Excalfatoria lineata*), the last-named being probably the smallest game bird in the world. The order odii, which by some authorities is included in the Gallinæ, is nted by four species of turnix, commonly known as quail, and narkable collared plain wanderer (*Pedionomus torquatus*).

order Grallatores includes many genera, and to it belongs the lian bustard, commonly known as the Plain turkey (*Eupodotis is*), as well as the waders, such as stilts, water-crakes, ibises, ls, gallinules, spoon-bills, herons, bitterns, and many others.

ng water-birds, Natatores, are enormous numbers of wild-fowl of criptions, ducks, geese, grebes, as well as black swans. The s essentially an Australian bird, and may be met with in all f the continent. The order embraces, also, the large and very species of sea-birds frequenting the coast, such, for instance, as sses, gulls, petrels, and cormorants.

order Struthiones, or running birds, is represented by the emu *ius novæ-hollandiæ*), the largest bird in this part of the globe, e, unfortunately, rapidly being exterminated.

les the birds mentioned above, there are others of perhaps te, but numerous, and frequently very beautiful. They are irably described and depicted in the celebrated work of Mr. which occupies a high rank amongst the scientific publications of tury.

FISHES.

According to the late Rev. J. E. Tenison-Woods, S.J., no less than different families of fishes, comprising 348 species, frequent the w of New South Wales. These are enumerated in the subjoined tabl

Name of family.	No. of species.	Name of family.	No. of species.
Percidæ	50	Ophiocephalidæ	1
Squamipinnes	4	Trachypteridæ	1
Nandidæ	2	Pomæcentridæ	4
Mullidæ	3	Labridæ	18
Sparidæ	14	Gadopsidæ	1
Cirrhitidæ	6	Gadidæ	4
Scorpænidæ	11	Pleuronectidæ	9
Teuthididæ	2	Siluriidæ	5
Berycidæ	3	Scopelidæ	6
Kurtidæ	2	Salmonidæ	1
Polynemidæ	2	Galaxiidæ	7
Sciænidæ	2	Scombresocidæ	6
Xiphiidæ	1	Clupeidæ	12
Trichiuridæ	1	Chirocentridæ	1
Acronuridæ	1	Symbrachidæ	1
Carangidæ	15	Murænidæ	11
Cyttidæ	1	Syngnathidæ	6
Coryphænidæ	2	Sclerodermi	21
Scombridæ	10	Gymnodontes	12
Trachinidæ	5	Carcharidæ	8
Batrachidæ	1	Lamnidæ	1
Pediculati	4	Scyllidæ	3
Cottidæ	7	Cestraciontidæ	2
Cataphracti	1	Spinacidæ	1
Gobiidæ	15	Rhinidæ	1
Blenniidæ	17	Pristiophoridæ	1
Sphyrænidæ	3	Rhinobatidæ	2
Atherinidæ	4	Trygonidæ	3
Mugilidæ	7	Torpedinidæ	1
Fistularidæ	1	Raiidæ	1

The edible fishes comprise 105 different species; amongst the known may be mentioned:

The schnapper (*Pagrus unicolor*), the most valuable of all Aust fishes, is found along the whole extent of the coast, and is very a dant. It is a deep-water fish, found generally near rocky poin reefs running out into the sea. The schnappers "school" as i termed, during the summer months, and are then most plentiful. young fish, known as red bream, frequents the harbours and est of the coast, but is never found in shallow water. The schnapp caught by the hook, which it takes freely, as it will attack almost bait. It sometimes attains a very large size, weighing as much as 3 The fish cures well, and is said to be equal to the finest cod, and i every respect superior to ling.

he nannigai is a deep-water fish, caught with the hook, and ranks h in public estimation as an edible fish. The supply is not large, as fish is not specially sought after, being chiefly obtained by fishermen earch of schnapper. The nannigai is scientifically interesting as one the oldest forms of bony-fishes now surviving.

The black rock-cod is considered one of the best of Australian fish, d is also a deep-water fish, never captured by the net. It grows to great size, specimens from 35 lb. to 40 lb. being not uncommon, whilst h weighing over 100 lb. are met with in the markets. It is found re abundantly in the warmer waters of the north of the colony, ere, as a rule, it attains larger proportions than to the southward of dney. In the vicinity of the islands lying off the New South Wales ast—the Seal Rocks, Solitaries, Elizabeth Reef, and Lord Howe land—the black rock-cod may be taken in almost any quantity, and the largest size.

A fish of great size and beauty, known in Australia as the salmon, is und off the coast in prodigious quantities. It has no affinity whatever the true salmon, and is inferior as an article of food.

The flat-head, a fine fish, of which there are several varieties, is ptured both by the hook and net. It is of excellent quality, and ranks igh amongst New South Wales fishes.

There are four species of whiting found in these waters. The common and-whiting and the trumpeter-whiting are both very abundant, but he other two species are more rare. The sand-whiting is perhaps the sh most in demand in the metropolitan markets, where it is to be btained all the year round.

The jew-fish is the largest edible fish found on the New South Wales oast, attaining sometimes a length of 5 feet. It is found at all seasons, ut most frequently during summer. The teraglin is of the same family s the jew-fish, though it does not reach an equal size. The air bladder large and of excellent quality, being of great value for the making of inglass.

The mackerel is obtained in enormous quantities off the coast, and metimes even in the harbours. It is a good fish when eaten fresh, but decomposes rapidly.

The family of Mugilidæ, or mullets, is well represented in Australian aters. The sea mullet is a large fish, often attaining a length of 2 feet, nd a weight of 8 lb. It is regarded by some authorities as unsurpassed richness and delicacy of flavour by any fish in the world; and it its these shores in countless numbers in the season when it is in the st condition. When young the fish keeps entirely to the creeks and kes, where it increases in size very rapidly, but when full-grown it ks the open waters.

There are four species of gar-fish found on the New South Wales st. The Sydney gar-fish is very abundant, especially towards the end summer, making its appearance in shoals, sometimes of enormous size. The river gar-fish is even of better quality than the last me but it is not so plentiful as formerly. The other species are selc with. There are numerous other varieties of fishes found in th of New South Wales, many of which are very valuable as a food, but for the most part they are neither so numerous nor obtained as those referred to.

Destructive fishes are by no means rare, the shark famil largely represented, not only in the deep sea, off the coast, but the harbours. The shark is not, however, absolutely valueles fins find a ready sale in the Chinese markets; the skin also h commercial value; while from the liver is extracted a large qua valuable oil, equal in every respect to cod-liver oil.

Several varieties of fishes which have long disappeared fro parts of the world are still represented in New South Wales. A these is the cestracion, or Port Jackson shark, whose teeth those of the fossil acrodis found in the mesozoic deposits.

During the season the Australian waters teem with herri season of immigration being the last six months of the year. T four species, but two only are of commercial importance, though accurate knowledge of the composition of the shoals might leac discovery of other valuable species. The most valuable of this of fishes is the pilchard. The Australian pilchard in a fresh equal in excellence to the Atlantic pilchard, and there is ever to suppose that it can be obtained in quantities sufficient tc competition to be entered into with the bloater and sardine of The maray also pass northward at the same time as the pilcharc like prodigious numbers, but both species keep well away f shore.

The rivers of the colony produce some most excellent speci fresh-water fish. The Murray, Murrumbidgee, Lachlan, and are the most plentifully stocked, the Murray cod (*Oligorus M* being perhaps the most highly esteemed of their fishes. Anot of the same species is the *Oligorus Macquariensis*, which is to with in the upper branches of the Clarence. Specimens of bo varieties of fresh-water cod have been found weighing as n 100 lb. The silver perch, and several kinds of the Percidæ fa highly prized for their delicacy, are plentiful in the rivers. Richmond River the cat-fish (*Copidoglanis tandanus*) is very whilst herrings and mullet are caught in almost all the easte of the colony.

Little systematic attempt has yet been made to acclimatise varieties of edible fishes, although success would most proba any efforts in this direction, every difficulty having been o Victoria, New Zealand, and Tasmania. Large quantities have been distributed in various localities, including tl Reservoir.

Mollusca.

of local shell-fish in economic interest is the oyster. Two r on the coast of New South Wales—a large one, considered m of the English oyster (*Ostrea edulis*), and popularly known oyster; and a smaller sort, the rock oyster (*O. glomerata*).

oyster reaches in Sydney the northern limit of its range, attain here to the luxuriant growth which it exhibits in ates. The prolific beds of Stewart's Island, New Zealand, arge proportion of the supply of mud oysters for the Aus- rkets. This oyster prefers deep and muddy places, where it a length of 8 inches. Nowhere is it now abundant, and, eems to be approaching extinction. The blacks formerly n it, but connoisseurs of the superior race disparage it as oarse.

he mud oyster, the rock oyster is well suited to cultivation. rn Queensland, favoured alike by more congenial climate, racts of shoal and sheltered water, and appropriate legislation, tion of this species has been most successful. The beds in ay supply not only the local demand, but also the require- he southern capitals. Though falling short of the perfection y the cultivation of the Bay of Biscay and the New York management of the Queensland oyster-beds excels that of any tralian fishery. When accurate details of the mode of breeding k oyster shall have been found by exact scientific inquiry, mpetus will be given to this flourishing industry. At present known is that in its habits the Australian rock oyster differs from the English and American kinds. Incidentally, it may ed that the English oyster cannot be consumed in May, June, August, but the Pacific oyster is in season all the year round. chapter on "Fisheries" it will be seen that large quantities are imported into the colony every year, and it is evident, that the local market will afford ample support to the of the bays and deltas of northern New South Wales. The o success are floods and shifting sandbanks, and the depre- boring worms and whelks; while among the advantages of ive occupation are the quickness of returns and the smallness required.

ies of spat are thrown off at various times, but especially occur in the spring, after which the rocks between tide-marks erally plastered with young shells of the size of a shilling. majority of these perish; those surviving reach maturity in ve months, and probably increase in size for two or three hen adult, their length is about 3 inches. Typically, they ly-waved, black-purple edges. Form and colour, however, ed by environment that specimens from different situations have been given different names. That they are really however, proved by taking a young purple and crumple from a position on rocks washed by waves, and placing it flat in calm water. Here it develops a thin, white, large shell; so that one shell may show one form at o another at the other, the line of junction marking the per ference.

No shell-fish other than oysters are regularly consumed in Wales, the Australian inheriting and accentuating the Bri for such small game. Occasionally, however, there are exp at the Sydney fish market the whelk (*Potamides ebenini* cockle (*Arca trapezia*), the former being cooked, and the either cooked or raw. Both the whelk and the cockle are but neither is at all like its English namesake. Probably food is restricted to the Greek and Italian element of population. The mutton fish, or "abalone" of Californ (*Haliotis naevosa*), is consumed by the Chinese, who, it collect it for export: but the ordinary citizen is unacquair The "ugarie," commonly miscalled by Sydney anglers by name of "pipi" (*Donax deltoides*), is frequently used for for food. As an article of diet, various squid (*Sepia cultrat* &c.) are left to the foreign and coloured of the local sea-faring but as bait their good qualities are better appreciated. Th New South Wales are not rich in ornamental shells, but t and rare "king-cockle" (*Trigonia Lamarckii*) from Sydney I valued gem, and, as a brooch, may often be seen worn.

Of pests in this division of natural history, the local spe worm, the "cobra" (*Teredo Saulii*), has wrought great dam shipping, wharves, and piers. It is a far larger and more species than any occurring in European waters. In g common European snail, the "limaçon" dear to the French e *aspersa*), has now obtained a firm footing, and ravages vegetables alike.

CRUSTACEA.

The crustacean fauna of New South Wales is extren species, but only about twelve kinds are used as an article these, six are fairly common and highly esteemed as food follow:

Common Swimming Crab (*Neptunus pelagicus*, Linn.).- commonest crab offered for sale in Sydney. It often atta of 2 or 3 lb., and is always in great demand, finding a r prices varying from 3d. to 9d. each. The principal supplies in Sydney Harbour, and from Botany Bay. The shell or this species is very broad, and ornamented on the front ty-four spines. Six of these are situated between the eyes, and on each side, the last being much larger than the others.

rimming Crab (*Goniosoma crucifera*, Fabr.).—This species is not non, although it may be seen exposed for sale in large numbers ng some months of the year. It attains to a size slightly exceeding preceding species. The claws are shorter, stouter, and the spines on arms large, compressed, and tooth-like. The front edge of the shell med with twenty spines—six on each side and eight between the . The colour is "reddish, with yellowish spots and bands, of which middle one represents a cross."

langrove Crab (*Scylla serrata*, Forsk.).—This is the largest and most able crab obtained on our coast. Unfortunately, it is not common; , a fairly large number have been exposed for sale during the last years. The price ranges from 1s. to 2s. 6d. each. The main plies are obtained from Botany Bay. In this species the claws are y large; the front edge of the shell is armed with twenty-four nearly al spines; and the back of the shell is convex and smooth. The our of the mangrove crab when alive is olive-brown. It inhabits p holes in the mud, and comes out at low tide to feed.

ydney Craw-fish (*Palinurus Hügelii*, Heller).—The craw-fish, or ster (as it is usually called), is very abundant along the whole coast-, but the chief supplies are obtained at Port Stephens. It is by far largest and most valuable of all the crustaceans of New South les, often attaining to 8 or 10 lb. in weight. Between four and five usand dozen are sold annually in the wholesale markets at prices ying from 1s. to 20s. per dozen.

second species is often seen offered for sale the "Southern Craw-" (*Palinurus Lalandii*), which is equal to the Sydney craw-fish as an icle of food, although usually much smaller. It may readily be tinguished by the highly-sculptured segments of the abdomen, and the numerous hairs surrounding the bases of the spines.

River Cray-fish (*Astacopsis serratus*, Shaw).—The cray-fish is seldom red for sale in Sydney, but it is much used as food along the banks the inland rivers. These crustaceans often attain to a foot or more ength, and are highly prized in the winter season, when they are in ir best condition.

ommon or Sand Prawn (*Penaeus canaliculatus*, Olivier).—The mon prawn is obtained in large quantities during the greater part he year, but in midwinter there is at times a falling-off in the supply, prices rise accordingly. In addition to the demand for consumption ood, this prawn is much used as bait, and frequently fetches very prices in times of scarcity. Large specimens often reach 8 or 9 es in length. The principal supplies are obtained from Sydney bour, Botany, and Cape Hawke. The species may be recognised by deep grooves which extend along each side of the beak or rostrum he hinder margin of the carapace, and by the rostrum, which is ed above with ten or twelve spines and with one below.

Tiger Prawn (*Penaeus monodon,* Fabr.).—The tiger prawn is a which appears to frequent the coast at irregular intervals. Occa it is captured in abundance in Sydney Harbour and at Botany. species may be readily identified by the numerous dark-coloure bands on the body and by the rostrum or beak, which has six o teeth above and three or four below.

River Prawn (*Penaeus Macleayi,* Haswell).—The river prawn so large as the two preceding species, seldom exceeding 4 or 5 in length. It is, however, very abundant, and appears to be obt during the whole of the year. The rostrum of this species has six teeth above, but none below—a characteristic which enables i easily distinguished from other forms.

FLORA.

HE vegetation of New South Wales is both extensive and varied as regards species. The flowering plants and vascular cryptogams ns and lycopods) of the colony—the indigenous species of which nber approximately 3,400, without taking cognisance of a large nber of varieties—have chiefly engaged the attention of botanists. owledge in regard to the *Thallophytes* (*Algæ*, *fungi*, and *lichens*), and the *Bryophytes* (*Hepaticæ*, or Liverworts, and mosses) is still very erfect, but is being added to almost daily. Approximately there e been enumerated—

Algæ	200
Fungi (from the microscopic fungi, such as rusts, to the large fungi, weighing several pounds)	500
Lichens	300
Liverworts	100
Mosses	260

hat the total number of indigenous plants recorded is about 4,760. ddition to these, a large number, both of useful plants and of weeds, been introduced, some of which have, to a considerable extent, laced the indigenous vegetation.

xclusive of cellular cryptogams, there are about 130 natural rs of plants represented in the indigenous flora of New South es. The orders with the largest numbers of representatives, so far hey have been ascertained, are given below. The figures are oximate, as the numbers are frequently being added to :—

(*a*) Dicotyledons—

1. *Rutaceæ* (Boronia family)	95
2. *Leguminosæ* (including 110 Acacias or Wattles, the Australian genus containing the largest number of species)	460
3. *Myrtaceæ* (Myrtle family, including the genus *Eucalyptus*, the Australian genus containing the largest number (60) of individuals)	215
4. *Compositæ* (Daisy family)	300
5. *Epacrideæ* (Epacris family)	80
6. *Chenopodiaceæ* (Salt-bush family)	76
7. *Proteaceæ* (Waratah family)	150
8. *Euphorbiaceæ* (Euphorbia family)	75

d = depth, l = length of beam, and s = co-efficient of rupture or l stress per square inch :—

Timber Trees.	Specific gravity.	Resistance t breaking or mo of rupture. =s
New South Wales—		lb. per sq. inc
Spotted gum	·995	13,300
Grey gum	·917	13,100
Flooded gum	1·178	14,800
Red gum	·995	6,900
Woollybutt	1·022	12,700
Blackbutt	1·067	13,700
White ironbark	1·177	16,900
Grey ironbark	1·182	17,900
Red ironbark	1·224	16,300
Forest oak	1·208	15,500
Turpentine	1·109	11,700
Stringybark	1·141	13,900
Blackwood	1·129	10,300
Tallow-wood	1·233	15,260
Australian teak	1·006	14,400
Mahogany	1·201	14,500
Forest mahogany	1·156	13,800
Swamp mahogany	1·216	12,100
White beech	1·008	15,600
Mountain ash	1·065	11,500
Rosewood	1·189	10,600
Pine	·868	8,800
European and other Foreign—		
Ash	·753	13,000
Beech	·690	10,500
Birch	·711	11,700
Bullet-tree	1·046	19,000
Chestnut	·535	10,660
Ebony	1·193	27,000
Elm	·544	7,900
Fir, Red pine	·48 to ·70	8,300
,, Spruce	·48 to ·70	11,100
,, Larch	·50 to ·56	7,500
Greenheart	1·001	22,000
Kauri pine (New Zealand)	·579	11,000
Lance wood	·675 to 1·01	17,350
Lignum vitæ	·65 to 1·33	12,000
Mahogany (Honduras)	·56	11,500
,, (Spanish)	·85	7,600
Oak (British)	·69 to ·99	11,800
,, (Danzig)	·69 to ·99	8,700
,, (American)	·99	10,600
Sycamore	·59	9,600
Teak (Indian)	·66 to ·88	15,500
Willow	·40	6,600

CONSTITUTION AND GOVERNMENT.

E record of New South Wales as a Crown colony is more a matter f history than of current statistics. It is therefore not proposed , in the following sketch, with events prior to the establishment ponsible Government; but a brief narrative of the early history ttlement of the country will be found in the opening pages of this e.

present form of government was inaugurated forty-three years e " Act to confer a Constitution on New South Wales, and to Civil List to Her Majesty," having received the Royal assent on h July, 1855. This important statute was proclaimed in Sydney 24th November of the same year, and at once came into ion, sweeping away entirely the former system, and constituting tive representative Chamber—thus, by the granting of equal ges, making the colonists of New South Wales the equals of their ymen in other parts of the Empire. The ties which bound the to the mother country were in no way loosened, for the Constitu- ct simply conceded to the people of New South Wales the rights prevailed in the United Kingdom, namely, of taxing themselves, being governed by Ministers responsible to a Parliament elected ular vote. The authority vested in the Sovereign remains the s before, though the mode of its exercise is widely different. us to Responsible Government, the Sovereign exercised, through vernor, almost despotic power, this official uniting in himself the ve and legislative functions. Personal liberty and independence herefore, to no small degree in his control; but with the establish- f Responsible Government this state of things ceased, and the t measure of individual liberty is now found compatible with the tection of public rights. The readiness with which the people colony adapted themselves to the forms and practice of their new ment was not a little remarkable, and fully justified their assump- its privileges.

laws are enacted in the name of the Queen, "by and with the of the Legislative Council and Legislative Assembly," the or, as the Royal Deputy, immediately giving the assent of the gn to Acts of Parliament, or, if he should think fit, reserving r the consideration of Her Majesty. In order that the Consti- may be clearly understood, it will be well to consider, under heads, the several elements of which the Government and ture consist.

are cut down and sawn; and in view of its special importa
account of the forest wealth of the colony is given in some d
the chapter dealing with forestry—the subject being dismiss
with a brief description of the appearance of the forests, and th
of the principal timber trees of commercial value.

Forests extend over almost the whole area of the colony, ex
portions of the Monaro, the Lachlan, the Murrumbidgee distric
the trans-Darling region, where extensive treeless plains occur,
with salt-bush, scrub, or species of natural grasses, the most im
of which have already been described. The country cove
timber may be divided into three classes—open, brush, an
forests.

Open forests cover the greatest portion of the surface of the
and are found in every formation. The trees met with are chiefly
of Eucalyptus, Angophora, and other genera of the order Myrtac
prevalence of the eucalypti, and the large extent covered by the
give the country a rather monotonous aspect. But the park-like
ance of the open forests, and the beauty of the many flowering
win admiration in spite of the sameness of the trees; while e
dull, greyish blue of the foliage of the gum-trees, when relieve
yellow blossoms of the wattle, including the graceful myall, or th
ful and shapely kurrajong, is not without its attractiveness. T
are for the most part straight and cylindrical in the trunk, an
full grown their first branch is at a considerable height from the
The roots of the eucalyptus often lie at no great distance from the
soil, an adaptation of nature to the peculiar climatic condition
country. The finest specimens of most of the timber trees, those
the most valuable timber, are found on ridges and hill sides, i
frequently too rough and stony for cultivation. This circums
in many ways fortunate for the colony. In the course of set
when the rich plains are denuded of their trees, and when scar
make timber more appreciated than it is at present, land not ada
agricultural settlement will still be available for the cultivatio
finest trees. Amongst the many trees of commercial value, i
specimens of red gum (*E. rostrata*) and apple-trees (*Angoph*
velutina), on the northern river flats, mark the course of the
while on the ridges and mountain sides other species predomin
as the white or she-ironbark (*E. paniculata*), narrow-leaved i
(*E. crebra*), broad-leaved ironbark (*E. siderophloia*), mugga or
bark (*E. sideroxylon*), blackbutt (*E. pilularis*), white mahog
acmenoides), tallow-wood (*E. microcorys*), spotted gum (*E. ma*
grey box (*E. hemiphloia*), red mahogany (*E. resinifera*), grey
punctata and *E. propinqua*), forest red gum (*E. tereticornis*), and
blue gum (*E. saligna*). Neither must turpentine (*Syncarpia la*
one of the most beautiful trees of the colony, nor the brush box (*T*
conferta) of the northern rivers, a tree much in request for orn
purposes, be forgotten.

ices of the Lieutenant-Governor should not be available, the or may appoint whomsoever he pleases as his deputy.

Governor's functions, according to the Letters Patent, Com- , and Instructions, may be recapitulated as follow :—

Governor is the custodian of the Great Seal, under which all grants, etc., must pass.

Governor has the appointment of his own Council—the Executive. lso to summon that Council, and is ordinarily its President; but absence some other member may be nominated to preside. It l, however, to appoint some member of the Ministry permanent resident, who presides in the absence of the Governor.

Governor is the fountain of honour within the colony, since to longs the power to appoint, in the Queen's name, all Judges, s of the Peace, Commissioners, and other "necessary officers linisters": and, by virtue of his powers as Viceroy, he may e from the exercise of his office any official so appointed.

Governor is also the depositary of the prerogative of mercy the colony, having it in his power to pardon, either absolutely litionally, any offender convicted in New South Wales. He can mit fines, penalties, and forfeitures due to the Crown, but he pardon or remit on the condition of the offender voluntarily the colony, unless the offence has been a political one only. In ital cases until recently the final responsibility of deciding r or not the death penalty should be carried out rested solely he Governor, but, by a new arrangement which has been agreed ll the Australasian colonies, such final power is now exercised Governor "with the advice of the Executive Council." This the procedure of these colonies, in regard to capital cases, on lines to the system that has for some time past been in force da. Its adoption was suggested and strongly urged by Lord the former Governor of New Zealand; and Lord Knutsford, retary of State for the Colonies in the second Salisbury Ad- tion, ascertained the views of the various Australasian colonies e subject. It being found that they all accepted the proposal provement upon the practice then existing, a circular despatch to each colony with instructions for its adoption. The new vas first brought into operation in New South Wales towards of October, 1892.

overnor is also vested with the authority of the Crown, enabling nominate the members of the Upper House of the Legislature, summon, prorogue to a future day, or dissolve "any legislative xisting in the colony. His instructions, however, provide the exercise of the above powers he is to act by the advice of cutive Council in all cases except those whose nature is such is opinion the public service "would sustain material prejudice to follow such advice," or in matters too trivial to submit to ncil, or "too urgent to admit of their advice being given"; but in all such urgent cases he must communicate to the Council as practicable the measures taken by him, and his reasons for acting. expressly provided, however, that the Governor may, if he th disregard the advice of the Executive and act in direct opposi the declared will of his advisers, but in such cases he is requ make a full report of the whole circumstances for the informa the Secretary of State for the Colonies.

The Governor acts as Viceroy as regards giving the Royal as or vetoing Bills passed by the Legislature, or reserving them special consideration of the Sovereign. The instructions deal with this matter, but it is usual in practice to be guided to extent by the advice of the law officers of the Crown. There ar different classes of Bills, however, to which the Governor is bo refuse the Royal assent. They are:—

(1.) Divorce Bills (that is, private bills divorcing pa persons).

(2.) Bills making any kind of grant, gratuity, or donation Governor.

(3.) Bills affecting the currency.

(4.) Bills imposing differential duties, which are not in acc with the Australian Colonies Duties Act, 1873.

(5.) Bills apparently contrary to Imperial treaty obligations

(6.) Bills interfering with the discipline or control of Her M land or sea forces employed in the colony.

(7.) Bills of great importance, or extraordinary in their whereby the Royal prerogative, or the rights and p of Her Majesty's subjects residing beyond the col the trade and shipping of the United Kingdom dependencies, may be prejudiced.

(8.) Bills containing provisions to which the Royal asse already been refused, or which have been once disa unless they contain a clause suspending their op until the Queen's pleasure has been signified, or unl Governor is satisfied that there is urgent necess bringing any such Bill into immediate operation, in case he is empowered to assent to the Bill on be the Queen, if it is not repugnant to the law of E or inconsistent with Imperial treaty obligations; every such case he is required to transmit the Bill Majesty, together with his reasons for assenting to it

The following Acts of Parliament regulate the action of the G in assenting to Bills on behalf of the Queen, or reserving them consideration of the Sovereign:—5 and 6 Vic., cap. 76, secs. 31 and 8 Vic., cap. 74, sec. 7; and 13 and 14 Vic., cap. 59, secs. and 33. The effect of these enactments is to deprive any reser of all force and legality until the Queen's assent thereto has been communicated to the Governor; and power is given to Her Ma continuously for one year after naturalisation. It was provided in the principal Act that in either case he must have resided three months continuously in the electoral district for which he claimed to vote; but by the amending Act 60 Vic. No. 25 the period of residence was reduced to one month in the case of a person already on the rolls, and who had but removed from one district to another. Every such person, being of the full age of 21 years, and not otherwise disqualified, is entitled to have his name on the electoral roll, and to have an elector's right issued to him. The disqualifications, under the Constitution Act, apply to persons attainted or convicted of treason, felony, or other infamous offence in any part of Her Majesty's dominions, unless they have received a free or conditional pardon, or have undergone the sentence passed on them for such offence; and, under subsequent enactments, to persons in the Naval and Military Service on full pay (except the militia and volunteers), and to persons of unsound mind, or in receipt of public charity. All other disqualifications have now been removed.

Power was given to the Governor under the Act of 1893 to subdivide each electoral district into divisions, and to appoint to each district an Electoral Registrar, with Deputy Registrars for the several divisions. It is one of the duties of these Registrars and Deputy Registrars to issue certificates known as electors' rights to those entitled to them. These electors' rights are printed in red ink upon paper specially prepared to prevent fraudulent imitations, with butts, like cheques, in accordance with the forms shown in Schedule A of the principal and amending Acts. They are bound in books, and numbered consecutively in black figures. Every person who has established his qualification to vote, and who has been placed on the electoral roll, is entitled to receive an elector's right upon signing his name in a book kept for that purpose, as well as on the butt and the face of the right itself. Under the principal Act an elector who removed from one district to another within three months of an election was practically disfranchised; but, as stated above, this period has now been reduced to one month, and until the elector is qualified to vote in the district to which he has removed he may use his right in his old district. Provision is also made for the issue of a substituted right in the event of a right being lost or defaced. Every elector's right remains in force until cancelled in the prescribed manner. It is provided by the amending legislation of 1896 that an elector who has changed his abode from one district to another may obtain a right for his new district after he has resided one month therein, and may have his name inscribed on the Additional Roll on a declaration by the Registrar of his original district stating that he was enrolled there. When the Registrar of any district grants an application for an elector's right other than in lieu of one held for another district, he inscribes the name of the elector in a Provisional List, copies of which, during the first week of each month, are exhibited at every post-office and police-office within the district, so that objection to any name may be taken and heard at the

These rules have been virtually adopted in New South Wales
the undoubted right of the Governor, as the depositary of the
prerogative, to refuse to grant a dissolution, if he think fit, has
more than once exercised. In March, 1877, Sir Hercules Rob
refused to grant a dissolution to Sir John Robertson, and in Septe
of the same year he also declined to enable Sir Henry Parkes to
the country. The reason alleged in each case was that the Ass
refused to make provision for the expenditure of the year. It wil
be seen that a grave responsibility is thrown upon the Governor i
exercise of the unquestioned right of granting or refusing a dissol
of Parliament, and in the cases mentioned it can hardly be doubte
Sir Hercules Robinson acted within his powers. The Viceroy i
conservator of the rights and interests of the whole population, a
must be evident that grave evils would ensue were a dissolution t
place before supplies had been granted.

The exercise of the prerogative of mercy is such an impo
function of the Governor, and he is so liable on some occasio
have strong pressure brought to bear upon him in connection wi
that it will be well to quote at length the instructions received
years ago upon this point. The mode of procedure in capital case
already been referred to, and in other cases the Governor is instr
not to pardon or reprieve any offender without receiving the adv
one, at least, of his Ministers; and in any case in which such pa
or reprieve might directly affect the interests of the Empire, or o
country or place beyond the jurisdiction of the Government o
colony, the Governor must, before deciding as to either pardo
reprieve, take those interests specially into his own personal consi
tion in conjunction with such advice as aforesaid. In another pa
his instructions the Governor is permitted to act in opposition t
advice of the Executive Council "if he see sufficient cause," but
to report any such matter to the Sovereign without delay.

One exception to the rule that every exercise by the Governor o
Royal prerogative is practically subject to the control of the Le
ture, occurs in connection with the exercise of his office as Command
Chief of the land and sea forces. The Governor's powers in this re
are defined and regulated by the Military and Naval Forces Regul
Act of 1871, which, after providing for the raising and mainte
of a standing force, goes on to vest the supreme command in
"Governor," which title, in the interpretation clause, is define
mean "the Governor with the advice of the Executive Council,"
the context shall otherwise indicate. Full powers with relation t
Volunteer Force are also bestowed on the Governor by the Volu
Regulation Act of 1867, but in this, as in the former statute, "Gove
only means "the Governor with the advice of the Executive Cou
if this meaning is not inconsistent with the context or subject-matter
will at once be seen that these are both important limitations,
certain imaginable contingencies the Governor is left free to act

own responsibility. This places the Governor almost in the position of the Commander-in-Chief in England (when such an officer exists, which is very seldom, the control of the army usually being vested in Generals commanding-in-chief); that is, he has at times the absolute disposal of the armed force of the colony. This power is peculiar to New South Wales, as in other British colonies the Governor possesses no more power over the military than he does over any civil department of the Service. The position of the Governor as Captain-General does not, however, give him power to take the direct command of Imperial troops, should any such be stationed in the colony.

As regards the far more important power of the Governor to proclaim martial law, different opinions are held. But there is no doubt, as the power has not been conferred by any statute in force in the colony, that, if it exists, it must be a matter of prerogative. The necessity for proclaiming martial law has happily never occurred since the advent of Responsible Government.

THE EXECUTIVE.

The Executive Council is composed of the nine salaried Ministers, namely: the Chief Secretary, the Treasurer, the Attorney-General, the Secretary for Lands, the Secretary for Public Works, the Minister of Justice, the Minister of Public Instruction and of Labour, the Secretary for Mines and Agriculture, and the Postmaster-General; with sometimes a Vice-President of the Executive Council, who is without a portfolio. These form the Cabinet, and, of course, are responsible to Parliament. The Ministry, as the advisers of the Governor, must also retain his confidence: but, practically, this is seldom likely to be withdrawn, so long as they command a working majority in the Assembly. The Governor may dissolve Parliament although the Ministry have not sustained a defeat, and in this case the continued existence of any Government would depend directly on the vote of the constituencies, but such a contingency can happen but seldom.

Apart from the Vice-President of the Executive Council, who holds no portfolio, it is rare for more than one Minister to be selected from the Upper House, and it will thus be seen that the principle of the responsibility of members of the Government to Parliament is fully carried out. For every act of the Governor as Viceroy some Minister is responsible to Parliament: and even in matters of Imperial interest, where the final onus rests upon the Governor, he himself is responsible to the Imperial Government, whose members are under the control of the House of Commons, so that no loophole is left for the exercise of any arbitrary act. The Crown, except in two instances (appeals to the Privy Council, and the bestowal of titles), acts towards the Executive through its representative, the Governor: and so long ago as the inception of Responsible Government, Earl Grey declared, in an official despatch, that he should make "a

judicious use of the influence, rather than of the authority, of his
which wise maxim has usually been followed. But in extreme
such as when his sanction is requested to any illegal proceedin
Governor is bound, without question, to keep the law, though h
thereby be brought into hostile relations with the Cabinet. Sir M
Hicks-Beach, in a communication to the Governor-General of Can
1879, clearly laid down the doctrine that the Governor of any I
Colony "has an unquestionable constitutional right to dismi
Ministers, if from any cause he feels it incumbent on him to d
This does not militate against the doctrine of responsibility; for
Ministry appointed by the Governor do not possess the conf
of Parliament, they cannot hold office, and the Governor w
forced to give way, or else persevere till he can select a Mi
whom the Assembly will accept. The final control will thus be
every other case, with the representatives of the people. In m
of routine the Governor will necessarily act on the advice
Ministers, and in most cases relating to the internal economy
departments, he will even adopt the individual recommendations
Ministers by whom they are severally controlled.

As regards matters of purely Imperial interest, the Gover
responsible to the British authorities for their due conservation
in consequence of his action in any such matter, he is involve
dispute with his Ministers, he is bound to refer them to the Sove
should his action have been endorsed by the Colonial Office.
conduct were not approved of in England he would most likely be re
It follows from this, that in no case can the Governor be held
responsible directly to Parliament for his conduct. His Ministe
responsible, but personally he has only to render an account
Crown itself—that is, to the Imperial Parliament.

The Executive Council cannot discharge any function unles
summoned by the Governor, and unless at least two membe
addition to the Governor or presiding member, be present to f
quorum. Formal minutes are, of course, kept of all proceedings.

The Executive Council, as at present constituted, is as follows:

Premier and Treasurer	The Right Hon. George Houstoun Reid Q.C.
Chief Secretary	The Hon. James Nixon Brunker.
Attorney-General	The Hon. John Henry Want, Q.C.
Secretary for Lands	The Hon. Joseph Hector Carruthers.
Secretary for Public Works	The Hon. James Henry Young.
Minister of Public Instruction and of Labour	The Hon. James Alexander Hogue.
Minister of Justice	The Hon. Charles Alfred Lee.
Postmaster-General	The Hon. Varney Parkes.
Secretary for Mines and Agriculture	The Hon. Joseph Cook.
Vice-President of the Executive Council and Representative of the Government in the Legislative Council (without portfolio)	The Hon. John Hughes.

Since the introduction of Responsible Government there have been wenty-eight Ministries; but as three of these became merged into hose next succeeding without the resignation of their members, the ctual number of cabinets holding power may properly be said to have een twenty-five, whose average tenure of office, excluding the Ministry at present in power, has been about one year and five months. Nine Governments were displaced by votes of censure, expressed or implied; three resigned in consequence of defeat on important measures of policy; two retired on being saved from defeat only by the Speaker's casting-vote, and three others through a motion for the adjournment of the House being carried against them; three, as previously stated, were merged into the succeeding Ministries; five resigned without a direct vote being carried against them, but in consequence of not possessing a working majority; one Government fell to pieces through internal disagreements; and one resigned in consequence of the Governor declining to appoint to the Legislative Council a certain number of its nominees. The following is a list of the ministries that have held office, with the duration of power in each case:—

No.	Ministry.	From	To	Duration.	
				months.	days.
1	Donaldson	6 June, 1856	25 Aug., 1856	2	19
2	Cowper	26 Aug., 1856	2 Oct., 1856	1	6
3	Parker	3 Oct., 1856	7 Sept., 1857	11	5
4	Cowper	7 Sept., 1857	26 Oct., 1859	25	20
5	Forster	27 Oct., 1859	8 Mar., 1860	4	11
6	Robertson	9 Mar., 1860	9 Jan., 1861	10	0
7	Cowper	10 Jan., 1861	15 Oct., 1863	33	7
8	Martin	16 Oct., 1863	2 Feb., 1865	15	18
9	Cowper	3 Feb., 1865	21 Jan., 1866	11	19
10	Martin	22 Jan., 1866	26 Oct., 1868	33	6
11	Robertson	27 Oct., 1868	12 Jan., 1870	14	16
12	Cowper	13 Jan., 1870	15 Dec., 1870	11	3
13	Martin	16 Dec., 1870	13 May, 1872	16	28
14	Parkes	14 May, 1872	8 Feb., 1875	32	26
15	Robertson	9 Feb., 1875	21 Mar., 1877	25	13
16	Parkes	22 Mar., 1877	16 Aug., 1877	4	24
17	Robertson	17 Aug., 1877	17 Dec., 1877	4	0
18	Farnell	18 Dec., 1877	20 Dec., 1878	12	3
19	Parkes	21 Dec., 1878	4 Jan., 1883	48	16
20	Stuart	5 Jan., 1883	6 Oct., 1885	33	2
21	Dibbs	7 Oct., 1885	21 Dec., 1885	2	14
22	Robertson	22 Dec., 1885	25 Feb., 1886	2	3
23	Jennings	26 Feb., 1886	19 Jan., 1887	10	24
24	Parkes	20 Jan., 1887	16 Jan., 1889	23	27
25	Dibbs	17 Jan., 1889	7 Mar., 1889	1	20
26	Parkes	8 Mar., 1889	22 Oct., 1891	31	16
27	Dibbs	23 Oct., 1891	2 Aug., 1894	33	11
28	Reid	3 Aug., 1894	Still in office.	……………	

for leaving town, or otherwise utilising the whole day in holid making.

Speaking generally, it may be said that the electors of the col display a considerable amount of interest in public affairs, and t percentage of votes cast is not far below that recorded in the Uni Kingdom, where momentous issues have been decided by a gen election. It is true that in the United Kingdom the system of pl voting is still in force, and the number of non-resident voters is v large; but the elections there extend over a fortnight, while in New S Wales they are all held on one day, and, furthermore, in this colo some of the electoral districts are of vast extent, and many electors only record their votes at considerable personal inconvenience.

The number of males of full age compared with the total populati is very large, the proportion at the last Census being 29 per ce According to the official lists—which, however, as before stated, known to be in an unsatisfactory state—the number of persons enrol at the general election in 1898 amounted to 24·3 per cent., or nearly o fourth of the total population. The average number of electors on t roll per member was 2,595, and the estimated population to each memb was 10,686. The subjoined table gives the result of all the gene elections which have taken place under Representative Government:—

No. of Parliament.	Voters on Roll.	No. of Electors to a Member.	Total Members returned.	Members unopposed.	Votes on Roll in contested Electorates.	Votes recorded.	Percentage of Votes recorded.	Informal Votes.	Percentage of
First	44,526	825	54	*	*	*	*	*	
Second	72,177	1,002	72	14	54,896	27,894	50·81	*	
Third	88,346	1,227	72	19	63,022	27,490	43·62	22	0
Fourth	106,189	1,475	72	19	75,676	28,340	37·45	29	0
Fifth	119,872	1,665	72	15	90,736	44,311	48·84	31	0
Sixth	128,734	1,788	72	11	108,080	56,331	52·12	102	0
Seventh	151,798	2,108	72	8	125,488	60,004	47·82	80	0
Eighth	160,843	2,234	72	10	104,575	57,651	55·13	334	0
Ninth	160,945	2,205	73	16	120,698	62,172	51·51	*	
Tenth	188,500	1,745	108	14	140,848	90,657	64·36	1,785	1
Eleventh	196,289	1,737	113	17	166,260	96,842	58·26	2,002	2
Twelfth	232,190	1,900	122	8	203,669	124,378	61·07	2,564	2
Thirteenth	256,406	2,068	124	17	226,228	131,062	57·93	2,275	1
Fourteenth	280,160	2,045	137	13	257,763	154,924	60·10	2,041	1
Fifteenth	305,456	2,166	141	7	285,897	184,091	64·39	3,642	[illegible]
Sixteenth	298,817	2,296	125	1	296,749	204,246	68·82	3,310	1
Seventeenth	267,458	2,139	125	8	252,267	153,034	60·66	1,354	[illegible]
Eighteenth	324,337	2,595	125	3	316,818	178,717	56·41	1,638	[illegible]

* Unrecorded.

The cost of the general election of 1894 was £25,989; of £20,405; and of 1898, £15,976. In addition to this expenditure,

£22,547 was required in 1894 for the inauguration of the new
ectoral system, as allowances to electoral registrars and their deputies
al to the police, and for printing and advertising; while from
95 to 1897 the average annual expenses of the system amounted
about £12,750. Since the passing of the Act establishing triennial
arliaments, the average duration of the life of the Assembly has been
der two years and three months. Taking the expenditure for this
riod at the average rate of the four years 1894–97—£15,200 per
num—and adding the mean cost of the last three general elections, a
al of £54,990 is obtained as the cost of electing a Parliament of
erage duration under the present system. This gives an average of
440 for each of the 125 electoral districts into which the colony is
vided, and, on the basis of the 1898 figures, 3s. 5d. for every voter
rolled, and 5s. 11d. for each vote cast. Under the system previously
force, the cost of electing a Parliament was, it is estimated, about
27,000, equal to £192 for each of the 141 members of the fifteenth
arliament, 1s. 9d. for each elector on the roll, and 2s. 11d. for each
ote cast at the general election of 1891—the last which took place
nder the old system.

FEDERATION.

A notice of the Constitution and Government of New South Wales
uld be incomplete without some reference to the great question of
stralian Federation, which seems now to be within reach of a
tlement. It has already been shown in the initial chapter of
s work that the federation of the various provinces was not over-
ked by the framers of the first free Australian Constitution, who
posed the establishment of a General Assembly "to make laws in
tion to those intercolonial questions that have arisen, or may here-
r arise," and who, in fact, sketched out a tolerably comprehensive
eration scheme. Unfortunately, however, that proposition was
luded with another for the creation of hereditary nobility, and in the
rm of opposition and ridicule with which the latter idea was greeted,
former sank out of sight. From time to time since Responsible
vernment was established the evil of want of union among the
stralian colonies has been forcibly shown, and the idea of federation
gradually become more and more popular. Some years ago the
ement took such shape that, as the result of an intercolonial
ference, the matter came before the Imperial Parliament, and a
sure was passed, permitting the formation of a Federal Council, to
ch any colony that felt inclined to join could send delegates. The
meeting of the Federal Council was held at Hobart, in January,
6. The colonies represented were Victoria, Queensland, Tasmania,
stern Australia, and Fiji. New South Wales, South Australia, and
Zealand declined to join, but South Australia sent representatives
subsequent meeting. The Council has held eight meetings, at
ch many matters of intercolonial interest have been discussed, the

last having been held in Melbourne early in 1899. One meet every two years is necessary to keep the Council in existence. Be from its very inherent constitution only a deliberative body, hav no executive functions whatever, the Federal Council possesses control of funds or other means to put its legislation into force, those zealous in the cause of federation have had to look elsewhere the full realisation of their wishes.

An important step towards the federation of the Australas colonies was taken early in 1890, when a Conference, consisting representatives of each of the seven colonies of Australasia, was h in the Parliament House, Melbourne. The Conference met on the February, thirteen members being present, comprising two re sentatives from each of the colonies, except Western Australia, wh sent only one. Sir Henry Parkes, Premier and Colonial Secretary, Mr. W. McMillan, Colonial Treasurer, represented New South Wa Mr. Duncan Gillies, Premier of Victoria, was elected President. Se meetings were held, the question of federation being discussed at c siderable length; and in the end the Conference adopted an addres the Queen, expressing their loyalty and attachment, and submitt certain resolutions which affirmed the desirableness of an early uni under the Crown, of the Australian colonies, on principles just to that the remoter Australasian colonies should be entitled to admiss upon terms to be afterwards agreed upon; and that steps should taken for the appointment of delegates to a National Australas Convention, to consider and report upon an adequate scheme for a Fede Constitution.

In accordance with the terms of that resolution, delegates were pointed by the Australasian Parliaments, and on the 2nd March, 18 the National Australasian Convention commenced its sittings in Legislative Assembly Chambers, Sydney, having been convened at instance of Mr. James Munro, the Premier of Victoria. There w forty-five Members of the Convention altogether, New South Wa Victoria, Queensland, South Australia, Tasmania, and Western Austr (which had only recently been placed in possession of the privilege Responsible Government) each sending seven delegates, and New Z land three. Sir Henry Parkes, then Premier of the mother colony, unanimously elected President of the Convention; Mr. F. W. We Clerk of the Legislative Assembly of New South Wales, was appoin Secretary; Sir Samuel Griffith, Premier of Queensland, was elec Vice-President; and Mr. (now Sir) J. P. Abbott, Speaker of the N South Wales Legislative Assembly, was elected Chairman of C mittees.

A series of resolutions was moved by the President, Sir Henry Park setting forth certain principles necessary to establish and secure enduring foundation for the structure of a Federal Government, approving of the framing of a Federal Constitution; and after discuss d amendment the resolutions were finally adopted, affirming the lowing principles :—

1. The powers and rights of existing colonies to remain intact, except as regards such powers as it may be necessary to hand over to the Federal Government.
2. No alteration to be made in States without the consent of the Legislatures of such States, as well as of the Federal Parliament.
3. Trade between the federated colonies to be absolutely free.
4. Power to impose Customs and Excise Duties to be in the Federal Government and Parliament.
5. Military and Naval Defence Forces to be under one command.
6. The Federal Constitution to make provision to enable each State to make amendments in its Constitution if necessary for the purposes of Federation.

Further resolutions approved of the framing of a Federal Constitution hich should establish a Senate and a House of Representatives—the tter to possess the sole power of originating money Bills ; also a Federal upreme Court of Appeal ; and an Executive consisting of a Governor-eneral, with such persons as might be appointed as his advisers. On he 31st March, Sir Samuel Griffith, as Chairman of the Committee on onstitutional Machinery, brought up a draft Constitution Bill, which as fully and carefully considered by the Convention in Committee of e Whole, and adopted on the 9th April, when the Convention was rmally dissolved.

The Bill of 1891 aroused no popular enthusiasm, and parliamentary ction to its provisions was not sought in any of the colonies ; federa-n fell into the background of politics, and although efforts were made some of its zealous advocates to keep the movement before the blic, it was left to Mr. G. H. Reid, Premier of New South Wales, a years later, to rescue the cause from the position of obscurity which it had been relegated by general apathy. It was the inion of Mr. Reid that a greater measure of success could be ured by enlisting the active sympathies and aid of the electors, and th that object in view he invited the Premiers of the other colonies meet in conference for the purpose of devising another scheme. this Conference, which was held at Hobart in the beginning of 1895, the Australasian colonies except New Zealand were represented. was decided to ask the Parliament of each colony to pass a Bill bling the electors qualified to vote for members of the Lower House hoose ten persons to represent the colony on a Federal Convention. work of the Convention, it was determined, should be the framing Federal Constitution, to be submitted to the people for approval by ns of the referendum.

uring the year 1896 Enabling Acts were passed by New South les, Victoria, South Australia, Tasmania, and Western Australia ;

and were brought into operation by proclamation on the 4th January, 1897. On Anniversary Day, the 26th January, the writs were issued in New South Wales. The election was held on the 4th March, the representatives chosen by the people being:—Messrs. Edmund Barton, Q.C.; G. H. Reid, M.P. (Premier and Treasurer); J. H. Carruthers, M.P. (Minister for Lands); W. McMillan, M.P.; W. J. Lyne, M.P.; J. N. Brunker, M.P. (Chief Secretary); R. E. O'Connor, Q.C., M.L.C.; Sir J. P. Abbott, M.P. (Speaker of the Legislative Assembly); and Messrs. J. T. Walker and B. R. Wise. The Convention met in Adelaide on the 22nd March, and after drafting a bill for the consideration of the various Parliaments, adjourned until the 2nd September. On that date the delegates re-assembled in Sydney, and debated the Bill in light of the suggestions made by the Legislatures of the federating colonies. In the course of the proceedings it was announced that Queensland desired to come within the proposed union; and in view of this development, and in order to give further opportunity for the consideration of the Bill, the Convention again adjourned. The third and final session was opened in Melbourne on the 20th January, 1898, the colony of Queensland being still unrepresented; and, after further consideration, the Draft Bill was finally adopted by the Convention on the 16th March for submission to the people.

In its main provisions, the Bill of 1898 followed generally that of 1891, yet with some very important alterations. It proposed to establish, under the Crown, a federal union of the Australasian colonies, to be designated the Commonwealth of Australia. A Federal Executive Council was created, to be presided over by a Governor-General appointed by the Queen. The Legislature was to consist of two Houses—a Senate, in which each colony joining the Federation at its inception was conceded the equal representation of six members; and a House of Representatives, to consist of, as nearly as possible, twice the number of Senators, and to which the provinces were to send members in proportion to population, with a minimum number of five representatives for each of the original federating states. The principle of payment of members was adopted, for the Senate as well as the House of Representatives, the honorarium being fixed at £400 per annum. The nominative principle for the Upper House was rejected, both Houses being elective, on a suffrage similar to that existing in each colony for the popular chamber at the foundation of the Commonwealth; but it was left to the Federal Parliament to establish a federal franchise, which, however, could only operate in the direction of the extension, not the restriction, of any of the existing privileges of the individual colonies. And while the House of Representatives was to be elected for a period of three years, Senators were to be appointed for twice that term, provision being made for half their number to retire every third year. The capital of the Commonwealth was to be established in federal territory.

he federal authority was assigned power to deal with a large
of matters, with the provision that in case of conflict between
and State law the former should prevail. Customs and excise
be taken over on the establishment of the Commonwealth;
sts and telegraphs, naval and military defence, lighthouses and
ys, beacons and buoys, and quarantine, on dates to be proclaimed,
thout further legislation. A uniform tariff of Customs and
was to be imposed within a period of two years, intercolonial
hen to become absolutely free. As it was recognised that the
r of the services mentioned would leave the States with large
nces in their provincial finances, a provision was inserted in the
der which the Commonwealth was required to raise from Customs
cise duties four times the sum needed from that source for its
rposes in the exercise of the original powers conferred upon it,
hand the excess thus raised to the local treasuries. Other
of revenue were left open to the Federal Treasurer, so that he
not be compelled to go to the Customs for the whole revenue
might be required. For five years after the imposition of the
n tariff, it was provided that the surplus revenue raised should
rned to the States on the basis of their actual contributions—
ascertained by a system of accounts—and thereafter in such
ions as might be considered fair by the Federal Parliament.
ovince of Western Australia, where the Customs revenue is
onally high, and is largely collected on the produce of the other
s, was to be permitted to gradually relinquish its intercolonial
during a period of five years, instead of abandoning them at
and to retain the revenue thus secured for its own purposes.
was given to the Commonwealth to take over the railways of
onies with their consent, and to take over the whole or part of
ate debts, applying the surplus Customs and Excise revenue to
yment of the interest charge thereon. The proper administration
laws relating to the transaction of trade between the States of
sion was to be directed by an Inter-State Commission, on whom
ive powers were conferred. Provision was made for the pre-
n of the imposition of preferential and discriminating railway
which might operate unjustly against a neighbouring colony, due
always being paid, however, to the financial obligations of the
which had laid down the lines. The maintenance of the rivers
ate of navigability was recognised as coming within the trade
mmerce provisions; but the people of a colony through which a
ows were not to be deprived of a "reasonable" use of its waters
servation and irrigation purposes.

right of originating Bills appropriating money or imposing taxa-
as reserved to the House of Representatives. These Bills could
amended by the Senate; but the Upper House might suggest
ments or recommend the omission of any of their provisions, the
of Representatives dealing with these suggestions as they pleased.

In all other matters of legislation, the two Houses were granted equal powers; and it was provided that in the event of any Bill being twice passed by the House of Representatives and twice rejected or shelved by the Senate, the two Houses could be simultaneously dissolved, and if this failed to provide a solution of the difficulty, a joint sitting might be held, at which the Bill in dispute could be adopted by a majority of three-fifths of the members present and voting at the joint sitting. The judicial power of the Commonwealth was vested in a High Court of Australia, empowered to hear appeals from all federal Courts or Courts having federal jurisdiction, from the Supreme Courts of the States, and from the Inter-State Commission. The right of appeal to the Privy Council in all cases not involving the interpretation of the Federal Constitution, or the Constitution of a State was not abrogated; but the Federal Parliament was empowered to limit the matters which might be taken to England. Appeal to the Privy Council on points of Constitutional law was forbidden. Lastly, the Federal Constitution could only be amended if the proposal were first adopted by an absolute majority of both the Senate and the House of Representatives, and afterwards accepted by means of the referendum both by a majority of the people of the Commonwealth and by a majority of the States.

Warmly received in Victoria, South Australia, and Tasmania, the Bill was viewed somewhat coldly by a section of the people of New South Wales, and this feeling rapidly developed into one of active hostility, the main points of objection being the financial provisions, equal representation in the Senate, and the difficulty in the way of the larger colonies securing an amendment of the Constitution in the event of a conflict with the smaller States. As far as the other colonies were concerned, it was evident that the Bill was safe, and public attention throughout Australasia was rivetted on New South Wales, where a fierce political contest was raging, which it was recognised would decide the fate of the measure for the time being. The fears expressed by its advocates were not so much in regard to securing a majority in favour of the Bill, as to whether the statutory number of 80,000 votes necessary for its acceptance would be reached. These fears were proved to be well founded; for on the 3rd June, 1898, the result of the referendum in New South Wales showed 71,595 votes in favour of the Bill, and 66,228 against it, and it was accordingly lost. In Victoria, Tasmania, and South Australia, on the other hand, the Bill was accepted by triumphant majorities. Western Australia did not put it to the vote; indeed, it was useless to do so, as the Enabling Act of that colony only provided for joining a federation of which New South Wales should form a part.

The existence of such a strong opposition to the Bill in the mother colony convinced even its most zealous advocates that some changes would have to be made in the Constitution before it could be forced upon the people; consequently, although the general election in New Sou Wales, held six or seven weeks later, was fought on the federal iss yet the opposing parties seemed to occupy somewhat the same grou

the question narrowed itself down to one as to which should be
isted with the negotiations to be conducted on behalf of the colony
a view to securing a modification of the objectionable features of
Bill. The new Parliament decided to adopt the procedure of send-
the Premier, Mr. Reid, into conference armed with a series of
utions affirming its desire to bring about the completion of federal
n, but asking the other colonies to agree to the reconsideration of
provisions which were most generally objected to in New South
s. As they left the Assembly, these resolutions submitted, first,
with equal representation in the Senate, the three-fifths majority
e joint sitting of the two Houses should give way to a simple
ity, or the joint sitting be replaced by a provision for a national
ndum; second, that the clause making it incumbent upon the
al Government to raise, in order to provide for the needs of the
s, £3 for every £1 derived from Customs and Excise Duties for
n purposes, and thus ensuring a very high tariff, should be
ated from the Bill; third, that the site of the federal capital
d be fixed within the boundaries of New South Wales; fourth,
better provision should be made against the alteration of the
laries of a State without its own consent; fifth, that the use of
d rivers for the purposes of water conservation and irrigation should
ore clearly safeguarded; sixth, that all money Bills should be dealt
in the same manner as Taxation and Appropriation Bills; and
th, that appeals from the Supreme Courts of the States should
rmly be taken either to the Privy Council or to the Federal High
t, and not indiscriminately to either; while the House also invited
er inquiry into the financial provisions of the Bill, although avow-
s willingness to accept these provisions if in other respects the
were amended. These were all the resolutions submitted by the
rnment to the House, but the Assembly appended others in
ct to the alteration of the Constitution and the number of
tors, submitting, on the first of these points, that an alteration
e Constitution should take effect if approved by both Houses
a national referendum; that a proposed alteration should be
itted to the national referendum if affirmed in two succeeding
ns by an absolute majority in one House, and rejected by the other;
hat no proposed alteration transferring to the Commonwealth any
rs retained by a State at the establishment of the federation should
effect in that State unless approved by a majority of electors voting
in; and on the second point, that the number of senators should
reased from six to not less than eight for each State.

Legislative Council adopted the resolutions with some important
lments, discarding the suggestion in the first resolution for a
al referendum; submitting that the seat of the Federal Govern-
hould be established at Sydney; more clearly preserving the rights
people of the colony to the use of the waters of its inland rivers for
es of water conservation and irrigation; carrying all appeals

from the Supreme Courts of the States to the Privy Council: a declining to affirm its preparedness to accept the financial sche embodied in the Bill. Further, the House suggested that the plan o submitting proposed alterations of the Constitution to the people b means of the referendum should be altered, and that no rights or pow retained by a State should be afterwards transferred to the Comm wealth without the consent of both Houses of Parliament of that Sta The New South Wales Premier decided to submit the resolutions both Houses to the other Premiers in conference, attaching, howev greater importance to those of the Assembly, as embodying the vi of a House which had just returned from the country. This confer was held in Melbourne at the end of January, 1899, Queensland bei represented; and an agreement was arrived at whereby it was decid that, in the event of a disagreement between the two Houses Parliament, the decision of an absolute majority of the members the two Houses should be final: that the provision for the retenti by the Commonwealth of only one-fourth of the Customs and Ex revenue might be altered or repealed at the end of ten years, anoth clause being added permitting the Parliament to grant financ assistance to a State: that no alteration in the boundaries of a St should be made without the approval of the people as well as the Par ment of that State: and that the seat of Government should be in N South Wales, at such place, at least 100 miles from Sydney, as migh determined by the Federal Parliament, and within an area of 100 squ miles of territory to be acquired by the Commonwealth, it being provid that the Parliament should sit at Melbourne until it met at the s of Government. A special session of the New South Wales Parliam was convened to deal with this agreement, and the Legislative Assem passed an Enabling Bill, referring the amended Constitution to t electors. The Council, however, amended the Bill so as to, fi secure the postponement of the referendum for a period of three mont second, make it necessary for the minimum vote cast in favour of t Bill to be one-fourth of the total number of electors on the roll; thi defer the entrance of New South Wales into the Federation un Queensland should come in. These amendments were not accepted the Assembly, and a conference between representatives of the t Houses was arranged: but this proved abortive, and twelve n members were appointed to the Upper House in order to secure t passage of the Bill. This course had the effect desired by the Gover ment; for the Council passed the Bill on the 19th April, an amendm postponing the referendum for eight weeks being accepted by t Assembly. The vote on the Bill will, therefore, be taken during t month of June.

SHIPPING.

E shipping returns of New South Wales are compiled from infor-
mation taken from the ships' papers, and contain particulars
g to all vessels trading to places beyond the colony. The
ge given is, in every case, the net registered tonnage according to
measurement. The arrival of a vessel from a country beyond
lasia must be notified to the Collector of Customs within twenty-
ours; and from one of the Australasian colonies, within twelve
If a vessel puts in at more than one port of the colony, she is
ed as having entered the first port only; and if she has come from
try beyond Australasia by way of a port or ports in one or more
other colonies, she is regarded as having arrived from the place
e she originally took her departure. When a vessel berths at a
or private sufferance wharf, a certain number of free lay days,
ted by the tonnage of the vessel and the amount of carrying
ty occupied by the cargo to be landed, are allowed in which to
rge, and after they have expired, tonnage dues are imposed, the
eing one farthing per registered ton per day if the vessel has been
aden, and if she has been partly laden only, one halfpenny per ton
ay for the first twenty-five days, and half that rate thereafter.
vessel berths for the purpose of loading only, no free lay days,
rse, are allowed, and on vessels of 240 tons or more the rate is one
nny per ton per day for the first twenty-five days, after which time
rthing per ton per day is imposed. On sailing ships the amount
culated on the registered tonnage, while with steamers the gross
ge is adopted. On smaller vessels and on lighters berthing solely
e purpose of loading, a wharfage rate of ten shillings for each day
t of a day is imposed. Where a Government wharf has been let
rivate company, the rent of the wharf is accepted by the State in
f tonnage dues, and in some of these cases wharfage rates are not
ed.

harfage rate, which varies in amount with the kind of merchandise
d, is levied on all goods discharged on the wharves, unless they
come from one of the other Australasian colonies, or from the
Islands, and are intended for transhipment, in which case they
empt from wharfage; and on goods shipped the rate charged is
hat levied on merchandise imported. No wharfage rates, however,
arged at the ports of Newcastle and Wollongong. For every

trading vessel, with the exception of a whaler or a ship which h
port through stress of weather or for the purpose of effecti
receiving orders, taking in provisions, obtaining bunker coal,
distress, a harbour and light rate of fourpence per ton is req
paid. The payment of the charge at one port affords immu
vessel at all ports of the colony for a period of six months, bu
expiration of that time the ship is liable to a similar charg
again comes to a port in New South Wales. Unless the ma
hold a certificate entitling him to pilot his ship into and o
pilotage is charged for on arrival or departure at the rate of
and 1d. per ton if the ship be in ballast. The smallest sum
£2 10s. at Sydney or Newcastle, and £1 5s. at any other p
there is a pilot establishment: and £20 is the maximum su
A whaler is not subject to pilotage charges; 1d. per ton on
charged for a vessel entering a port for the purpose of refitti
ing, or in order to obtain coal for use on board, and 2d. pe
she leaves; and vessels compelled to enter port through
weather, or for the purpose of receiving orders or taking in
or because they are in distress, are charged 1d. per ton on a
the same rate on departure.

When it is desired to remove a vessel from one part of t
to another, permission to do so must be obtained from th
Master, and if this officer should make the removal, a fee
the amount payable being £1 if the vessel does not exceed
£2 10s. if she does not exceed 1,000 tons; an additional £1
500 tons or part thereof up to 1,500 tons; and a uniform rate
for a tonnage exceeding 1,500. Before a vessel can sail, a ce
clearance must be obtained from the Collector of Customs.
has put into more than one port of the colony, she is returne
cleared at the last port only; and if she is bound for mor
port, she is returned as having left for the country in which h
port lies.

THE MARINE BOARD.

The Marine Board of New South Wales is a body compos
wardens, four of whom, including the President, are appoi
Government, and three, who must be registered owners of
not less than 250 tons, are elected triennially by owners of
100 tons and over. The Board supervises all matters relati
navigation, and transacts all business in connection with the
pension, and cancellation of certificates of competency and a
framing of harbour regulations, the preservation of ports
rivers, etc.; the licensing, appointment, and removal of pilots;
tion of lighthouses, lights, and rivermarks; granting licenses
watermen's boats, ferries, harbour and river steamers, etc.
transactions of a general nature, it acts in conjunction with

Board of Trade, and has jurisdiction over all British ships. It holds inquiries into shipping casualties in all cases where a port in the colony is the first entered after the occurrence, or the survivors have landed in New South Wales. The law provides for the establishment of local boards under the superintendence of the Marine Board in Sydney, but so far only one—that at Newcastle—has been created. The Public Service Board, sitting as a Royal Commission of Inquiry into the working of the Marine Board, has reported adversely on that body, and it is proposed by the Government to effect important changes in the administration of the navigation laws, one result of which will be that marine inquiries will be conducted by a District Court Judge, assisted by nautical assessors, following in that respect the practice of the Board of Trade.

Before certificates are issued by the Marine Board, certain conditions have, of course, to be fulfilled. It is necessary for a candidate for a master's foreign-going certificate to be at least 21 years of age, and to have served six years at sea; but for a master's certificate for the coasting trade the candidate may be one year younger, and have served but four years, one of which, however, must have been in the capacity of mate. A first mate's foreign-going certificate, or a certificate for the position of "only" mate, is not issued to a person of less than 19 years of age, nor to one who has served for a shorter period than five years; while for a second mate's certificate the lowest age is 17 years, and the shortest period of service four years. For the coasting trade, the age of the person to whom a mate's certificate is issued must not be less than 19 years, but he is only required to have served three years at sea. A first-class engineer must be at least 22 years of age, and second and third-class engineers at least 21 years old. Marine surveyors' certificates are issued to persons who have passed the examinations necessary for obtaining an extra first-class engineer's certificate, to master mariners who have been in command of foreign-going ships for not less than five years, and to those who have an extra master's certificate. Certificates of Service are ued to persons who have served as marine surveyors in New South ales for three years prior to 1881. Appointments to the pilot service made by the Marine Board, all pilots being Government officers. rtificates of exemption from pilotage are granted to masters of itish ships employed in the Australasian and South Sea Island trade passing the necessary examination, but they must have entered and the particular port for which the exemption certificate is desired ice with their vessels as masters or officers of the watch.

QUARANTINE.

he Board of Health have entire control of all matters relating to lth, and may place in quarantine any vessel, should they deem it adble to do so for the preservation of the public safety. In the course of the year 1897 the Government Health Officers at Sydney and N castle examined 544 vessels, of which 120 were detained for sp action. The passengers examined numbered 4,045, and the crew the vessels, 22,399. There is only one quarantine station in the col for persons. It is situated inside the north head of Port Jackson, in equipment and suitability of position it is surpassed by few quaran stations in the world. There are also two stations in Sydney Har —one at Bradley's Head and the other at Shark Island—and one at port of Newcastle, where foreign live stock may be placed in qua tine; and at Randwick there is another station for the isolatio Australian stock and horses imported from other countries. The r lations for the quarantine of animals are enforced by the Stock Br of the Department of Mines and Agriculture.

INCREASE IN SHIPPING.

The records of the shipping trade of New South Wales, altho carefully kept by the various Governors, are not available prior to year 1822, the earlier registers relating to the colony's statistics ha disappeared. There are in existence, however, numerous manus returns which record the shipping trade of the earlier years, and t will doubtless be published at some future date.

During the year 1822, the shipping amounted to 71 vessels ente aggregating a tonnage of 22,924; and 60 vessels cleared, with a t tonnage of 20,793. Twenty-eight years afterwards, just before separation of Port Phillip, the figures stood thus: 976 vessels ente with a tonnage of 234,215, and 1,014 vessels cleared, with a ton of 263,849. In 1851, the year of the separation of Victoria from parent colony, the trade fell to 553 vessels entered, measuring 153, tons, and 503 vessels cleared, of 139,020 tons; but in 1860, the following the separation of Queensland, the shipping amounted to 1, vessels entered, with a tonnage of 427,835, and 1,438 vessels clea of 431,484 tons—a considerable advance on the figures of the prev year. From 1860 to the present time trade has rapidly increased, at a greater rate than the population. In 1891, the shipping ent amounted to 2,821,898 tons; but this quantity fell to 2,804,549 ton 1892, and to 2,590,371 tons in 1893. In 1894, however, the ship entered rose to 2,859,968 tons, but the increase of 269,597 tons the measurement of the vessels which entered the ports during previous year did not represent a corresponding enlargement of import trade, as there was a large accession to the tonnage comin the colony in ballast—the bulk direct to Newcastle to load coal—prob in consequence of the scarcity of freights elsewhere in Austral However, the increase then witnessed has been more than maintai every succeeding year has seen an addition to the shipping entering ports of the colony, and in 1897 the tonnage of 3,331,877 was rea r far the largest amount recorded, and an increase on the figures 896 of 251,126 tons, all but 3,822 tons of which were represented ressels bringing cargo.

he increase of shipping has been maintained at a fairly constant , though checked occasionally by the occurrence of bad seasons here, he failure of prices in the European markets. The following table ws the quantity and tonnage of shipping arriving in and departing n New South Wales, at intervals of five years from the date of the iest records to the year 1890, and for each of the succeeding years :—

Year.	Entered.		Cleared.	
	Vessels.	Tonnage.	Vessels.	Tonnage.
1822	71	22,924	60	20,793
1825	85	24,559	75	22,688
1830	157	31,225	147	28,822
1835	260	63,019	269	66,964
1840	709	178,958	665	163,704
1845	597	105,352	614	103,961
1850	976	234,215	1,014	263,849
1855	1,152	353,323	1,185	362,482
1860	1,424	427,835	1,438	431,484
1865	1,912	635,888	2,120	690,294
1870	1,858	689,820	2,066	771,942
1875	2,376	1,109,086	2,294	1.059,101
1880	2,108	1,242,458	2,043	1,190,321
1885	2,601	2,088,307	2,583	2,044,770
1890	2,889	2,413,247	2,777	2,348,625
1891	3,021	2,821,898	3,100	2,872,338
1892	2,960	2,804,549	3,067	2,842,635
1893	2,914	2,590,371	2,916	2,602,957
1894	3,272	2,859,968	3,291	2,878,586
1895	3,121	2,929.758	3,090	2.930,280
1896	3,224	3,080,751	3.208	3,109,009
1897	3,345	3,331,877	3,120	3,412,554

The shipping tonnage of New South Wales greatly exceeds that of any er colony of the Australian group. Victoria stands next, after which ne South Australia, Western Australia, New Zealand, Queensland, l Tasmania. Of the total shipping of Australasia in 1897, nearly one rd entered and cleared at New South Wales ports.

NATIONALITY OF VESSELS.

The trade of the colony is, to a very large extent, carried on under British flag, the deep-sea trade with the mother country and British sessions being in the hands of the shipowners of the United Kingn, and the coasting trade chiefly in local hands. Since 1881, however,

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there has been a notable increase in foreign shipping, and at the pres day the greater portion of the direct trade transacted with foreign po is carried in vessels which are not British. This has been due to appearance in the Australian trade of the steamers of the Messager Maritimes in 1883, of those of the two German lines some time lat and more recently the vessels of the American and Japanese Compani From the table given below, showing the expansion in British foreign shipping during the last twenty-seven years, it will be seen t the British tonnage entered and cleared in 1870 was 1,333,410, or 9 per cent. of the total of 1,461,762 tons; while in 1880 the proport was as high as 92·9, British vessels representing 2,259,924 tons out a total of 2,432,779. In 1885, however, the British shipping had fal to 87·5 per cent., and in 1897, to 85·3 per cent., the foreign tonna having increased from 172,855 to 993,974 during the seventeen ye which have elapsed since 1880:—

Year.	British.	Foreign.	Total.
	tons.	tons.	tons.
1870	1,333,410	128,352	1,461,762
1875	2,001,641	166,546	2,168,187
1880	2,259,924	172,855	2,432,779
1885	3,615,582	517,495	4,133,077
1890	4,156,963	604,909	4,761,872
1891	4,902,607	791,629	5,694,236
1892	4,977,850	669,334	5,647,184
1893	4,704,300	489,028	5,193,328
1894	5,191,971	546,583	5,738,554
1895	5,215,174	644,864	5,860,038
1896	5,432,892	756,868	6,189,760
1897	5,750,457	993,974	6,744,431

Of the tonnage set down as British, the larger portion is owned registered in Australasia. Prior to 1891, the returns do not allow the colonial shipping being divided into that belonging to Australa and that belonging to other British colonies; but in 1870, out of 1,333,4 tons of shipping entered and cleared under the British flag, 964,1 tons, or 72·3 per cent., belonged to British possessions, the gr bulk being Australasian; in 1880, out of 2,259,924 tons of Brit shipping entered and cleared, 1,499,236 tons, or 66·3 per cent., belon to the colonies; while in 1897 the colonial shipping amounted 3,481,231 tons (of which 3,414,588 tons were Australasian) out o total of 5,750,457 tons, or 60·5 per cent. The amount of Brit alasian, and other colonial shipping entered and cleared at New Wales ports since 1870 was as follows:—

Year.	Shipping belonging—			Total, entered and cleared.
	To United Kingdom.	To Australasia.	To British Possessions other than Australasia.	
	tons.	tons.		tons.
1870	368,692	964,718		1,333,410
1875	740,683	1,260,958		2,001,641
1880	760,688	1,499,236		2,259,924
1885	1,520,091	2,095,491		3,615,582
1890	1,577,172	2,579,791		4,156,963
1891	1,813,716	3,029,067	59,824	4,902,607
1892	2,058,982	2,859,277	59,591	4,977,850
1893	1,808,340	2,866,967	28,993	4,704,300
1894	2,135,711	3,016,817	39,443	5,191,971
1895	2,244,650	2,882,579	87,945	5,215,174
1896	2,354,580	3,000,357	77,955	5,432,892
1897	2,269,226	3,414,588	66,643	5,750,457

mpared with the figures just given, the tonnage of the foreign ls trading with New South Wales is still small, although a advance has been made during the last fifteen years. Taking the 1897, for which the total tonnage of the principal nationalities is below, Germany stands first, then France, then the United States. ay and Japan are the only other nations whose carrying trade with lony is important.

	Tonnage.
Germany	321,097
France	223,683
United States	155,961
Norway	121,015
Japan	75,086
Other nations	97,132
Total	993,974

this amount of foreign shipping entered and cleared at the ports of lony in 1897, 693,176 tons traded direct with foreign countries, 3 tons with the United Kingdom and British possessions beyond ralasia, and the balance of 222,595 tons merely reflected the ments of vessels passing to and from the other Australasian ies, more than one-half being tonnage in ballast coming round to South Wales ports in search of freights. As compared with the 76 tons of foreign shipping which traded with foreign ports, the t foreign trade carried under the British flag represented but 39 tons, a considerable part of which consisted of the South Sea d trade conducted by Australasian vessels. Of the 4,022,575 tons ipping entered from and cleared for the other colonies of Australasia g the year, 3,225,846 tons were registered in Australasia, and 34 tons in the United Kingdom and other British possessions; and of the 1,391,241 tons which represented the direct trade tra with Great Britain and her other possessions, 113,861 ton registered in Australasia, and 78,203 tons in foreign countries.

STEAM AND SAILING VESSELS.

The records prior to the year 1876 do not distinguish the st from the sailing vessels, but the modern tendency to supersede vessels by steam has been abundantly apparent in the twenty-on which have since elapsed. In 1876 the steam tonnage was 912 compared with 1,215,171 tons of sailing vessels, being 42·9 per ce 57·1 per cent. respectively. The relative positions have lon been transposed, for the tonnage of sailing ships in 1897 w slightly higher than the figures of 1876, being 1,436,496 tons, 21·3 per cent. of the total shipping, as compared with 5,307,9 of steam, or 78·7 per cent. of the whole. The increase of steam for the twenty-one years has, therefore, been over 482 per cen progress of the tonnage of each class will be seen from the fo table :—

Year.	Steam.	Sailing.	Year.	Steam.	S
	tons.	tons.		tons.	t
1876	912,554	1,215,171	1893	4,227,186	9
1880	1,550,372	882,407	1894	4,407,522	1,3
1885	2,791,843	1,341,234	1895	4,447,716	1,4
1890	3,654,814	1,107,058	1896	4,769,750	1,4
1891	4,299,791	1,394,445	1897	5,307,935	1,4
1892	4,329,634	1,317,550			

The advantage offered by the New South Wales trade to shi is illustrated by the large amount of tonnage coming to the c ballast, and the small amount leaving without cargo. A large pr of the vessels arriving in ballast come from the ports of the nei ing colonies, where they have delivered a general cargo, and, been unable to obtain return freight, have cleared for Newcastle coal. The largest amount of tonnage entered in ballast in year since 1870 was in 1897, when it reached 905,928 tons, largest amount cleared was 82,956 tons in 1891. The tonnage and cleared in ballast for the years shown was :-

Year.	Entered.	Cleared.	Year.	Entered.	C
	tons.	tons.		tons.	
1870	237,246	21,004	1892	724,265	
1875	320,921	12,830	1893	621,189	
1880	217,763	16,219	1894	852,205	
1885	345,366	53,381	1895	852,813	
1890	544,264	66,846	1896	902,106	
1891	632,617	82,956	1897	905,928	

VALUE OF CARGOES.

s might be expected from the fact that over 27 per cent. of the tonnage h arrived in the colony in 1897 was in ballast, as against rather more 2 per cent. of the clearances, the average value of freights outward higher than that of the vessels inward. Thus the average value of goods imported by sea was £5 6s. 11d. per ton, while that of the goods rted was £5 12s. 10d., or 5·5 per cent. higher. If, however, allow- be made for shipping in ballast, the mean value of the exports was 15s. 6d., or 21·4 per cent. lower than the imports, which averaged 7s. per ton. New South Wales exports have, generally speaking, gh value per ton, and the fact that, when vessels entering and ing in ballast are excluded, they have a lower average value than imports, is due to the large amount of coal exported, the quantity 1897 having been 2,696,623 tons weight—equivalent to over 0,000 tons measurement out of a total of 3,412,554 tons.

will be seen from the following table that in the case of the most rtant of the countries with which the colony has commercial rela- s, the exports from New South Wales have a higher average value the goods imported. The figures for Queensland are exceptional, large quantity of gold is imported from that colony :—

Country.	Value of Imports per ton.			Value of Exports per ton.		
	£	s.	d.	£	s.	d.
United Kingdom	17	5	5	20	11	1
Victoria	1	0	11	1	1	5
Queensland	10	2	5	3	13	11
South Australia	0	9	11	1	9	1
Western Australia	0	6	5	6	16	7
Tasmania	2	3	4	1	6	9
New Zealand	2	18	9	1	9	9
Other British possessions	2	15	8	2	14	5
Belgium, France, and Germany	8	0	6	18	10	9
United States	15	7	5	11	14	6
Other foreign countries	4	0	0	1	6	7
Average	5	6	11	5	12	10

he trade with Belgium, France, and Germany has been grouped ther in the table, as it is impossible to find the true average value e trade of each of those countries, on account of the great bulk of Belgian trade being carried in French and German bottoms. The er part of the trade classed under "Other foreign countries" was acted with various groups of islands in the South Seas and with

South American countries. During 1897 the proportion of to
entering in ballast from Victoria was 37 per cent., from South Au
43 per cent., and from Western Australia 92 per cent. of the arr
and this circumstance partly explains the low rate per ton of the im
from those colonies. As for the outward trade, the large quant
coal shipped to the southern colonies lowers the general average
of the whole exports. The following are the average values of in
and exports per ton of shipping for the past ten years :—

Year.	Average Value of Imports per ton.	Average Value of Exports per ton.	Year.	Average Value of Imports per ton.	Averag of Ex per
	£ s. d.	£ s. d.		£ s. d.	£ s
1888	7 10 8	6 10 8	1893	5 19 0	6
1889	7 9 9	6 1 9	1894	4 18 0	5
1890	7 8 5	5 19 5	1895	4 17 0	5 1
1891	7 9 3	6 0 6	1896	5 13 2	5 1
1892	6 7 3	5 12 1	1897	5 6 11	5 1

MOVEMENTS OF SHIPPING.

The following table shows the yearly movements of to
exclusive of the coasting trade, of some of the principal nations
world, and also of New South Wales, with the rate of tonna
head of population, the returns being made up to the latest
available :—

Country.	Tonnage.	Per head of Population.	Country.	Tonnage.	P of l
United Kingdom ..	90,198,863	2·4	Italy	17,005,287	
France	30,026,932	0·8	Spain	28,023,337	
Germany	24,086,632	0·5	United States.....	39,881,044	
Norway...............	5,850,787	2·9	Arg'ntineRepublic	15,208,853	
Sweden...............	14,119,804	2·8	Canada	11,458,824	
Netherlands.........	15,611,910	3·5	New South Wales.	6,744,431	

Of the tonnage engaged in the outward trade of New South
12·4 per cent. went to the United Kingdom, though in valu
exports to the mother country were 45·3 per cent. of the total.
tonnage of vessels to Victoria and the other Australasian co
amounted to 54·8 per cent. of the whole, while in value the e
thereto reached only 19·1 per cent. As regards the other British
sions, the tonnage of vessels carrying goods to their ports amounted
per cent. of the whole, but the value only reached 3·1 per cent.

reign countries, the tonnage in 1897 amounted to 26·3 per cent. alue to 32·5 per cent. The following table shows the tonnage rom and cleared for the United Kingdom, the British colonies, of the principal foreign countries, as well as the value of the but it must be borne in mind that the figures represent the tonnage of the vessels carrying the goods, and not the actual the goods carried, which latter information it is impossible to

try.	Entered.				Cleared.			
	Tonnage.		Value.		Tonnage.		Value.	
	Total.	Per cent.	Total.	Per cent.	Total.	Per cent.	Total.	Per cent.
	tons.		£		tons.		£	
dom	437,538	13·1	7,557,069	42·4	424,640	12·4	8,728,828	45·3
....	889,011	26·7	930,734	5·2	809,455	23·7	867,081	4·5
....	342,664	10·3	3,468,457	19·5	319,615	9·4	1,181,681	6·1
alia	355,758	10·7	176,980	1·0	237,011	7·0	344,215	1·8
stralia	160,275	4·8	51,182	0·3	103,905	3·0	709,547	3·7
....	191,072	5·7	414,209	2·3	139,777	4·1	186,934	1·0
d..........	214,222	6·4	629,423	3·5	259,810	7·6	386,589	2·0
sh Posses-	307,583	9·2	856,576	4·8	221,480	6·5	602,449	3·1
rance and	148,179	4·5	1,189,333	6·7	166,820	4·9	3,092,465	16·1
es	122,807	3·7	1,887,877	10·6	209,977	6·2	2,462,319	12·8
ign Coun-	162,768	4·9	651,218	3·7	520,064	15·2	690,345	3·6
al	3,331,877	100·0	17,813,058	100·0	3,412,554	100·0	19,252,453	100·0

TONNAGE AND CREWS.

verage tonnage of vessels trading with New South Wales has increased since 1845; prior to that year transports formed so portion of the shipping that the size of vessel was shown to be ater than the average of those actually engaged in trade. The provement which has taken place may be traced in the following

r.	Average tonnage of vessels.	Year.	Average tonnage of vessels.
5	295	1875	463
5	246	1885	797
5	173	1895	939
5	306	1897	996
5	329		

870 the average tonnage of British and British-colonial vessels New South Wales has increased by 161 per cent. in the one

case and 137 per cent. in the other, while foreign vessels have in in average tonnage by 216 per cent. during the same period advance in all classes during the period of twenty-seven years h very marked, as the following figures attest :—

Year.	British.		Foreign.	Year.	British.	
	United Kingdom.	Colonial.			United Kingdom.	Colonial.
	tons.	tons.	tons.		tons.	tons.
1870	706	306	449	1892	1,696	684
1875	742	379	557	1893	1,766	647
1880	1,031	476	732	1894	1,769	615
1885	1,312	602	997	1895	1,784	648
1890	1,624	600	1,330	1896	1,921	663
1891	1,680	709	1,263	1897	1,840	724

The natural corollary to the increase in the size of vessel, provement in rigging and fittings, and the substitution of st canvas, is the decrease in the number of hands required per ton, the actual number of hands employed per vessel has increased. I intercolonial vessels carried an average of 23 men to every ves man to every 31·2 tons ; other British vessels carried an averag plement of 52 men, or 1 man to every 35·1 tons ; while foreig carried an average crew of 46 men, or 1 man to every 31·1 to 1870 British ships carried 1 man to every 26 tons, intercolonial 1 man to every 20 tons, and foreign vessels 1 man to 35 t decrease in the tonnage per sailor in foreign vessels being due finer class of ships that began to trade here in 1883. The fo figures show the average crews of British (United Kingdo Colonial) and foreign vessels for the periods mentioned :—

Year.	British.		Foreign.	Year.	British.	
	United Kingdom.	Colonial.			United Kingdom.	Colonial.
1870	27	15	13	1892	50	25
1875	27	17	14	1893	53	23
1880	44	21	25	1894	50	22
1885	45	24	36	1895	48	23
1890	53	22	49	1896	49	22
1891	52	25	41	1897	53	23

PRINCIPAL PORTS.

he relative importance of the various ports of Australasia may be rtained by an inspection of the following table, which shows the ping and trade of the principal Australasian ports for the year 1897. m these figures the rank of Sydney becomes evident. Melbourne rently takes the first place in tonnage; but for purposes of comison the figures should be reduced by a large amount—from 350,000 400,000 tons entered and a like quantity cleared, or altogether about 0,000 tons—to allow for the circumstance that the great ocean mers whose terminal port is Sydney are reckoned once on the way nd to New South Wales, and again when homeward bound for gland. When this is taken into account, it is found that the ipping of Melbourne is exceeded by that of Sydney, as the Victorian rt is also surpassed in the value of its trade. Newcastle occupies ird place: for in the figures given for Port Adelaide the mail steamers re reckoned twice over, as in the case of Melbourne. It should be oted in respect to Queensland ports that the tonnage of vessels is corded at every port of call, and on this account Townsville appears re important than it really is.

Port.	Entered.		Cleared.	
	Shipping.	Trade.	Shipping.	Trade.
	tons.	£	tons.	£
Sydney	2,321,214	17,302,514	1,916,075	17,438,592
Newcastle	820,199	509,941	1,243,591	1,723,325
Melbourne	2,342,447	13,098,633	2,258,068	15,539,177
Brisbane	720,707	3,115,953	725,439	2,120,833
Townsville	553,822	775,533	543,286	1,980,125
Port Adelaide	1,546,383	4,198.716	1,494,203	4,150,890
Port Pirie	134,256	361,902	199,804	1,248,080
Fremantle	212,099	4,745,570	225,073	1,615,603
Albany	936,951	360,611	885,304	1,528.135
Hobart	322,046	555,949	326,277	624,957
Launceston	104,111	583,238	106,124	602,654
Wellington	210,842	1,917,873	184.175	1,509,960
Auckland	249,610	2,132,477	188,778	1,365,040

he progress of the shipping trade of Sydney has been very uniform, increase from the year 1860 being at an average rate of about 5½ per . per annum. The vessels registered as entered considerably exceed in tonnage those cleared at Port Jackson. To account for th only necessary to state that vessels leaving Sydney for Newca the purpose of shipping coal are reckoned as departures from Ne and not from Sydney. For this reason the clearances of Ne uniformly exceed the arrivals, as will be noticed in the subsequen The practice of clearing vessels at both ports at one time obtain has been abandoned for many years, and vessels are now cleared port which they last leave. The following statement shows the entered and cleared at both Sydney and Newcastle for quinq periods from 1870 to 1890, and for consecutive years since th date. It will be seen that the total tonnage of Sydney incre 720,000 tons between 1870 and 1880, and by 1,532,000 tons b 1880 and 1890, while during the last seven years the incre already amounted to 1,236,000 tons :—

Year.	Sydney.		Newcastle.	
	Entered.	Cleared.	Entered.	Cleared.
	tons.	tons.	tons.	tons.
1870	385,616	364,758	283,091	383,242
1875	590,700	468,423	510,902	573,626
1880	827,738	641,996	400,598	516,480
1885	1,608,169	1,283,888	452,946	722,865
1890	1,644,589	1,356,632	625,398	842,180
1891	1,934,556	1,535,306	704,306	1,140,536
1892	1,896,677	1,594,108	729,167	1,024,318
1893	1,902,265	1,585,857	524,844	842,363
1894	1,959,435	1,612,179	721,931	1,035,930
1895	2,027,951	1,669,654	727,834	1,048,400
1896	2,104,613	1,806,438	783,669	1,084,220
1897	2,321,214	1,916,075	820,199	1,243,591

The comparative importance of the trade of Sydney may be rea viewing it in connection with the trade of the chief ports of the Kingdom. It will be observed that in absolute tonnage Sydne passed by only four English ports—London, Liverpool, Card Newcastle; while in point of value of trade transacted it is e by only London, Liverpool, and Hull. Twenty of the most im ports of the United Kingdom are shown in the following table f from the figures in which the coasting shipping and trade ha omitted. There is this important point to be observed, howev were Australasia regarded as one country, the intercolonial trad sting, and the figures for the New South Wales ports would reduced accordingly:—

rt.	Entered.		Cleared.	
	Shipping.	Trade.	Shipping.	Trade.
	tons.	£	tons.	£
n	9,110,925	151,209,683	6,686,734	82,651,899
ool	5,845,384	101,902,929	5,415,667	90,467,853
	4,485,782	3,300,076	7,504,927	6,504,418
stle	2,060,302	6,141,740	3,150,122	2,696,061
	2,278,875	26,973,445	1,862,107	21,114,501
mpton	1,573,956	11,290,993	1,434,253	11,542,462
	740,824	10,191,519	350,492	1,408,078
	891,931	8,838,767	863,937	2,747,213
y	874,490	7,808,687	849,176	10,186,384
ch	739,594	18,452,172	686,070	4,940,801
rt	1,066,254	943,968	1,552,456	1,880,120
rland	845,012	650,968	1,098,955	809,143
Shields	544,151	934,809	595,450	827,320
ven	390,180	8,806,415	379,797	2,868,942
w	1,418,724	12,187,747	2,002,662	13,752,718
	966,249	11,051,647	864,996	4,218,448
ldy	613,364	290,456	956,839	673,782
mouth	675,635	2,197,078	807,481	1,895,923
	419,146	4,696,977	266,254	389,440
	236,498	2,306,954	143,426	94,602
Wales—				
	2,321,214	17,302,514	1,916,075	17,438,592
stle	820,199	509,941	1,243,591	1,723,325

er seaport of the colony can be compared with either Sydney stle, though Wollongong now maintains a trade of some con- especially in coal; and of late years the importance of Eden, ay, has increased. In 1897 the vessels which entered Wollon- ct from places outside the colony were, with one exception, last, and totalled 72,119 tons; while at Eden the shipping mounted to 39,428 tons, and landed goods to the value of he shipping cleared at Wollongong had an aggregate tonnage , and at Eden 49,951, the value of the export trade at these being respectively £72,878 and £7,173.

rage tonnage of sea-going vessels lying in the port of Sydney 0,000 per diem. The daily average at the port of Newcastle 5,000 tons. On the day on which the greatest number of in port, in the wool season, the tonnage at Sydney is equal to 000, and that at Newcastle to 84,000. The value of the dinarily moored or anchored in the port of Sydney may be set ,000,000, and of that in the port of Newcastle at £500,000. t value of shipping afloat in the two ports on any one day ,500,000.

RIVER SHIPPING.

The trade borne by the rivers Murray and Darling varies great year to year, according as they are favourable or otherwise for navi The Murray River is navigable during the greater part of the ye the same cannot be said of the Darling, which as a rule can only by shipping during the period from March to September, when its is augmented by the flood-waters from the interior of Queensland the period over which the records extend both rivers have been nav and the tonnage at Wentworth on the Darling, at its confluence w Murray, and at Moama and other Murray River ports, is given following table for the last ten years :—

Year.	Tonnage entered at—	
	Wentworth.	Moama and other Murray Ports.
1888	22,427	28,339
1889	38,335	29,279
1890	42,637	30,140
1891	37,988	31,753
1892	31,071	28,781
1893	39,888	33,359
1894	47,224	41,403
1895	37,489	40,723
1896	38,623	36,800
1897	24,522	48,894

REGISTRATION OF SEAMEN.

Engagements and discharges of seamen are registered at the G ment Shipping Offices at Sydney and Newcastle, and with the C officers at other ports. In 1897 there were 15,453 seamen en and 13,921 discharged in Sydney: and 2,674 engaged, and discharged in Newcastle; while in the course of the same ye seamen were reported at Sydney, and 482 at Newcastle, as deserted from British vessels voyaging beyond Australasia. engagements and discharges are exclusive of those of foreign vessel ness in connection with which is transacted by the various Cons

REGISTRATION OF SHIPPING.

During the year 1897, 871 steamers and sailing vessels, repre 112,420 tons net, stood registered in the books of the Custom Ho belonging to the port of Sydney. Of these, 444 were steamers, colle of 64,111 tons net and 20,111 nominal horse-power. There w sailing vessels on the register at Newcastle, their net tonnage being and 52 steamers of 1,841 nominal horse-power and 2,609 na The total tonnage registered in the colony was 121,421, of 66,750 was steam tonnage, with 21,952 nominal horse-power.

e exclusive of lighters, of which there were 52, of a total : 3,146, registered at Sydney; and 45, of an aggregate tonnage at Newcastle. A fee of £1 is charged for a lighter's license, mits the boat to be employed for an indefinite period.
al tonnage registered in New South Wales for the years shown

Sailing vessels.			Steamers.			Total.		
No.	Tons.	Crew.	No.	Tons.	Crew.	Vessels.	Tons.	Crew.
50	8,349	380	14	1,494	89	64	9,843	469
93	12,197	556	37	3,903	286	130	16,100	842
54	7,003	325	20	2,159	168	74	9,162	493
49	4,876	280	50	6,387	394	99	11,263	674
28	6,234	191	21	4,027	278	49	10,261	469
53	9,492	280	40	5,239	351	93	14,731	631
60	3,282	262	46	5,848	458	106	9,130	720
32	5,972	231	33	4,200	288	65	10,172	519
29	4,897	153	19	3,067	140	48	7,964	293
13	1,363	85	13	5,172	186	26	6,535	271
24	2,661	80	26	5,541	208	50	8,202	288
29	6,378	185	20	8,220	223	49	14,598	408

the year 1897 two vessels, aggregating 484 tons, were sold to , and in consequence were removed from the registers of the Sales were also made to British subjects of 102 vessels, with a nage of 9,360, which remained on the registers at Sydney and .

PASSENGER STEAMERS.

ger steamers are certificated by the Marine Board on payment the certificate being renewable at least every six months. e last five years certificates were granted for the following:—

Year.	Number of Steamers.	Tonnage of Steamers.	Passengers for which Certificates were granted.
1893	240	64,593	55,195
1894	245	66,265	56,275
1895	231	63,361	52,397
1896	259	93,955	55,381
1897	256	108,619	55,415

e licensed in 1897, 106 were sea-going steamers and 150 were n harbour and river traffic.

CONSTRUCTION OF VESSELS.

The years 1883 and 1884 were marked by great activity in struction both of sailing and steam vessels, 50 sailing and 5 vessels having been built in 1883, whilst 39 sailing vessels steamers were built in the subsequent year. Trade then bec active, and the industry showed a tendency to die out. In had fallen lower than in any of the preceding years, and there little improvement since, the tonnage of sailing vessels built dur being only 832, and of steamers 631, in all 1,463. The num tonnage of vessels built in each of the years shown were as foll

Year.	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	Vessels.	Tonnage.
1880	29	1,938	12	861	41	2,799
1883	50	1,885	52	5,368	102	7,253
1884	39	2,518	64	5,145	103	7,663
1885	29	800	36	2,992	65	3,792
1886	27	1,339	40	2,637	67	3,976
1887	14	636	16	778	30	1,414
1888	9	304	11	394	20	698
1889	9	204	14	663	23	867
1890	9	394	6	697	15	1,091
1891	27	573	13	767	40	1,340
1892	27	782	10	317	37	1,099
1893	11	563	7	236	18	799
1894	6	466	8	463	14	929
1895	5	481	4	259	9	740
1896	7	369	8	598	15	967
1897	12	832	9	631	21	1,463

The building of steam vessels during the last ten years was of importance than that of sailing ships, the tonnage constructed the period being 5,025 of steam and 4,968 of sailing; but in mo years since 1892 the tonnage of the sailing vessels turned out of t of New South Wales has exceeded that of the steamers. S and ketches are the principal classes of sailing vessels buil colony, the general tonnage of each class averaging cons under 100 tons burden. The growing tendency to supplant vessels by steamers, and the substitution of iron for wood for th and hulls of vessels, have given a check to the wooden ship- industry, which at one time promised to grow to important dis Every kind of timber suitable for the construction of ships is f the rivers of the coast districts of New South Wales, but as the for this description of vessel has not increased, little advantag taken of the resources of the colony in this respect.

iable data have so far been procurable as to the number and of vessels built abroad for the New South Wales local trade, number must be considerable, and such vessels form an import value altogether lost sight of in the Customs returns. Some vever, of the large number imported may be gathered from the ion of the tonnage of other than New South Wales built vessels, r the past ten years has averaged 4,145 tons sailing and 4,103 n per annum.

DOCKS AND WHARVES.

ate accommodation is provided both by the Government and te enterprise for fitting and repairing ships in the colony. At there are three graving docks, five floating docks, and three lips. At Newcastle there are two patent slips; besides which e other docking and building yards in different parts of the r the convenience of coasters and small craft. The principal d slips in Sydney, with their leading dimensions and the size of ey will accommodate, are stated below :—

me of Dock.	Where situated.	Length.	Breadth	Draught of vessel that may be taken.	Lifting power of patent slip or dock.
ocks—		ft.	ft.	ft. in.	tons.
y (Government)..	Cockatoo Island ...	450	59	21 6	...
rland ,, ...	,, ,, ...	600	84	32 0	...
's	Balmain	640	66 at top, 54 bot'm.	19 0	...
ocks—					
tree's	Waterview Bay ...	160	42	12 0	474
....	Woolwich............	250	40	14 0	1,200
e (Mort's)	Johnston's Bay ...	317	55	15 0	1,500
ton's Bay (Mort's)	,, ...	90	28	7 3	120
's....................	White Bay	150	60	7 6	300
s—					
s No. 1	Balmain	270	30	11 ft. forward 17 ft. aft.	2,000
No. 2	,, ...	200	25	10 ft. forward, 16 ft. aft.	1,000
No. 3	,, ...	80	13 ft. 8 in.	5 3	40

therland Graving Dock at Cockatoo Island, the property of rnment, is one of the largest single docks in the world, and is f receiving vessels drawing 32 feet of water. During the year 2 vessels, of which 20 were British ships of war, were docked

at Cockatoo Island, 82 being repaired in the Fitzroy Dock,
the Sutherland Dock, the gross tonnage of the vessels being
The dock receipts for the twelve months amounted to £4,62
expenditure to £1,609, exclusive of interest on cost of constr

For natural facilities for shipping Sydney stands unrivalled.
deepens abruptly from the shores, so that the largest vessel
berthed alongside the wharves and quays. The Government
shores of Sydney Cove, along the margin of which magnifice
wharves have been constructed, which are capable of berthing
10,000 tons register. The depth of water at low tide ranges b
and 30 feet, and the wharves have an available frontage of 6
A large part of the wharfage at Pyrmont and Darling Harbo
Woolloomooloo Bay, are also in the hands of the State. Thes
are fitted with steam cranes and other appliances for the speedy
of the largest ships constructed. The appliances for handling ca
Pyrmont wharves, which are 3,500 feet in length, consist of f
cranes of ten tons each, and on all the jetties the railway line is l
The Government wharf at Darling Harbour, which is fitte
steam crane of ten tons, is 4,000 feet in length. Cowper
Woolloomooloo Bay, is 3,000 feet in length, and also affords
accommodation for large vessels. At Blackwattle Bay t
Government wharf 1,400 feet in length, and at White Ba
230 feet in length has been erected. The wharfage frontag
Jackson belonging to the Government is 20,200 feet. Powerfu
appliances and roomy stores, as well as electric lighting, are to
on all the important wharves, which are being rapidly exte
improved in order to keep pace with the growing shipping of
The total frontage of public and private wharves reaches nearl

Newcastle is also a well-equipped port, where vessels of 4
can be safely berthed; and every modern steam and hydraulic
for loading coal is found on its wharves. The Government o
all the wharfage, which extends over a length of about 13
The total length of the Bullock Island wharf is 7,760 feet, i
to which there are four ballast jetties each 50 feet long. 5,5
the wharf is used for the shipment of coal. There are 12
cranes of from 9 to 25 tons, each capable of shipping 1,000 to
in twenty-four hours; and 3 steam cranes of 15 tons each.
£130,000 is now being expended for the purpose of further i
the shipping facilities at Newcastle. On the town side of th
there are 3,570 feet of Government wharves, extending in a c
line, 2,130 feet being set apart for cargo berths for deep-draug
940 feet for general cargo, and 500 feet for passenger steam
wharf at Stockton is 600 feet long. It is entirely used for the
of coal, and has one 15-ton steam crane and one shoot. I
to the appliances mentioned, there are seven private shoo
loading of coal. By the port regulations, steamers are r
receive coal at the steam cranes on Bullock Island at the r

per day, and at the rate of 600 tons at the hydraulic cranes. iling vessels are expected to receive at least 400 tons per day from steam cranes, and 600 tons per day from the hydraulic cranes. It estimated that 28,800 tons of coal per day can be shipped at Newtle when all the appliances belonging to the Government and private panies are brought into use. There are also two patent slips owned private individuals, capable of taking up vessels of 100 and 1,100 respectively. Staiths, cranes, and other coal-shipping appliances ve been erected at Wollongong, Bulli, Coal Cliff, and other ports. ivate as well as Government wharves are found at all the chief ntres of population along the rivers of the colony, and all ports with trade of any importance have their jetties and shipping facilities.

The revenue derived from public wharves at Sydney, Newcastle, Wollongong, and other ports in 1897 was £67,136, of which sum Sydney ntributed £55,859, made up of £6,101 for tonnage rates, and £49,758 wharfage dues, rent, etc. Newcastle contributed £8,968, and Wollongong £323, in tonnage rates, no wharfage rates being collected those ports. At ports other than those mentioned, an amount of £1,986 was collected for wharfage rates, rent of jetties, etc., making the total receipts as stated.

LIGHTHOUSES.

The coast of New South Wales is well provided with lighthouses, the ber at the end of 1897 being 23, besides which there were 17 ding lights and light-ships for the safety of harbour navigation. The of erecting the lighthouses was £190,913, in addition to which a of £27,006 was spent on lanterns, making a total expenditure of 17,919 on construction and equipment, including £4,832 expended ing 1897 in connection with the construction of a lighthouse at Perpendicular. The South Solitary Island lighthouse cost the sum to construct, namely, £31,259, exclusive of the amount d for lanterns. The Macquarie revolving electric light, on the South d of Port Jackson, is one of the most powerful lights in the world, visible 25 miles at sea.

SHIPWRECKS.

The coast of New South Wales is free from any source of danger to els navigating it, and where reasonable precautions were taken wrecks ve been very rare. There are only two lifeboat stations on the coast, at the Sydney Heads, and the other at Newcastle; but the whale ats at the various pilot stations have been fitted with cork linings, d otherwise made useful for the work of rescue, in which many of m have been of excellent service. The steam tugs subsidised by the rine Board for the towing of ships in and out of port, are also ilable for the purpose of rendering assistance to vessels in distress;

and life-saving appliances are kept at certain places along
The majority of vessels lost have been under 100 tons burder
the year 1897 there were 14 wrecks within the jurisdictio
South Wales, the total tonnage of the vessels being 3,461,
value, including cargoes, £38,740. Three lives were lost out
of 196 on board. The largest vessel which met with disast
barque Adderley, 1,141 tons, which went ashore in Newca
during a gale. The barque Carrick, 898 tons, foundere
springing a leak; the steamer Fitzroy, 504 tons, was totall
near Morna Point, Point Stephens; the steamer Kameruka
ran on the rocks and became a wreck at Pedro Point, nea
while the schooner Heroine, of 123 tons, was caught in a gal
anchor, and was beached to save the lives of those on board.
vessels wrecked during the year were under 100 tons burden.
of three lives occurred in the case of the ketch Sunbeam, wl
for Brisbane with explosives, and was never again heard of.

The following statement shows the number of vessels w
wrecked on the coast of New South Wales, or otherwise
jurisdiction of the colony, during the last ten years:—

Year.	Under 50 tons.	50 to 100.	100 to 200.	200 to 300.	300 to 400.	400 to 500.	Over 500 tons.	Steam.	Sailing.
1888	6	2	3	1	1	1	1	6	9
1889	4	8	5	2	...	...	1	4	16
1890	3	6	2	1	1	...	3	5	11
1891	3	10	3	...	...	1	1	2	16
1892	4	5	2	...	...	...	...	4	7
1893	4	3	6	1	1	...	...	4	11
1894	5	10	1	...	1	...	1	6	12
1895	4	4	...	...	...	1	2	5	6
1896	1	4	2	2	...	...	...	5	4
1897	4	5	1	...	1	...	3	2	12

During the year 1897 the Marine Board of New South Wa
at Sydney, and the local Board at Newcastle, held twenty-one
Ten masters were examined regarding the loss of vessels:
exonerated, in one case the certificate was suspended for si
and the certificate of another master was cancelled. Seve
into collisions were instituted: one master was exone
cautioned, another reprimanded, a fourth censured, and a fif
certificate suspended for three months; while a second en
censured and cautioned, and one person-in-charge censured
inquiry into the stranding of a vessel, no blame was attac
master. An inquiry was also held regarding the burning
ship's boiler, the fifth engineer of the vessel being censu
supposed loss of a missing vessel was also made the subject
during the year.

DREDGING FLEET.

To keep open and improve the harbours and coastal rivers the Works partment, during the year ended 30th June, 1898, had employed ladder dredges, with an attendant fleet of 26 punts having aggregate tonnage of 8,680 ; 12 grab dredges ; 8 sand-pump suction dredges ; and 7 combined grab and sand-pump dredges. sides the dredging plant there were 17 tugs employed towing to sea, and on other service appertaining to dredging operations. work done and the cost for the financial year ended 30th June, for each class of dredge were as follow :—

Class of Dredge.	Tons Dredged.	Hours Dredging.	Expenditure.				
			Dredging only.			Dredging and Towing.	
			Total.	Per ton.	Per hour.	Total.	Per ton.
			£	pence.	£ s. d.	£	pence.
Ladder	2,405,730	16,143	30,258	3·02	1 17 6	39,667	3·95
Sand Pump ...	2,736,607	10,758	27,786	2·43	2 11 8	28,261	2·44
Grab and Sand Pump.	1,105,581	10,807	9,433	2·05	0 17 5	9,884	2·15
Grab	364,260	18,685	8,687	5·72	0 9 4	9,967	6·59
Total	6,612,178	56,393	76,164	2·76	1 7 0	87,779	3·18

The material dredged consisted for the most part of sand and mud, but stiffer material was raised by some of the dredges. The details show that while the average cost of dredging by ladder dredges was 3·02d. per ton, more than one-third of the total raised cost not more than 1½d., and the most expensive dredging was at the rate of 6·62d. The cost of raising material by grab dredges was on an average 5·72d. per ton, the least cost being 2·25d. for sand and mud. A considerable quantity of rock and boulders was removed by these dredges, otherwise the average cost would not have been higher than 3·79d. per ton. The sand-pump dredges, eight in number, removed 2,736,607 tons during 10,758 hours, at the rate of 254 tons for each dredge per hour, the average cost being £2 11s. 8d. an hour, or 2·43d. per ton.

The cost of dredging in New South Wales compares very favourably with that in other countries. Comparing the work done at the mouth the Hunter River at Newcastle with dredging on the Clyde, below Glasgow, it is found that the cost of lifting soft material by ladder dredges of equal power was in the former case 2·05d. per ton, and in the latter, 2·06d.; at Sydney, where the material removed was sand, y, and sewage, the cost was 2·62d.—a satisfactory result, especially when it is considered that wages are much higher in the colony than in Great Britain, and chandlery and other stores are dearer.

FARES AND FREIGHTS.

Looking at the extensive passenger traffic and shipping trade of South Wales, it would naturally be expected that a liberal scale of and freights would be in force, and this will be found actually to In many instances, indeed, the intercolonial rates have been extr low, owing to the keen competition among the various steamship panies. The following figures will give an idea of the average pas rates by steamer during 1897 :—

Ports.	Fares. First Class.	Fares. Second Class.
	£ s. d.	£ s. d.
NEW SOUTH WALES PORTS.		
Bateman's Bay	1 0 0	0 10 0
Bellinger River	1 15 0	1 0 0
Byron Bay	2 0 0	1 0 0
Clarence River	1 10 0	0 15 0
Eden	1 10 0	0 15 0
Macleay River	1 10 0	0 15 0
Manning River	1 5 0	0 15 0
Nambucca River	1 10 0	0 15 0
Newcastle	0 5 0	0 2 6
Port Macquarie	1 10 0	0 15 0
Ballina	1 10 0	0 15 0
Lismore	1 15 0	1 0 0
Ulladulla	0 15 0	0 10 0
Wollongong	0 4 0	0 2 6
VICTORIAN PORT.		
Melbourne	2 10 0 3 10 0	.... 1 0 0
QUEENSLAND PORTS.		
Burketown	15 5 0	7 5 0
Bowen	7 10 0	3 15 0
Brisbane	3 0 0	1 0 0
Bundaberg	4 10 0	1 15 0
Cairns	8 10 0	4 10 0
Cooktown	9 10 0	5 0 0
Mackay	7 0 0	3 10 0
Maryborough	4 0 0	1 10 0
Mourilyan Harbour	8 10 0	4 10 0
Normanton	13 10 0	6 15 0
Rockhampton	6 0 0	2 15 0
Townsville	8 0 0	4 0 0
Thursday Island	12 15 0	9 15 0
SOUTH AUSTRALIAN PORTS.		
Adelaide	3 4 0 6 10 0	2 0 0 4 10 0
Port Pirie	5 10 0	2 0 0
Port Darwin (Northern Territory)	18 0 0	9 0 0
WESTERN AUSTRALIAN PORTS.		
Albany	[illegible] 10 0 12 0 0	4 0 0 8 0 0
Perth (Fremantle)	8 0 0	3 0 0
TASMANIAN PORTS.		
Hobart	1 10 0 2 5 0	1 0 0
Launceston	1 10 0	1 5 0

Ports.	Fares. First Class.	Fares. Second Class.
NEW ZEALAND PORTS.	£ s. d.	£ s. d.
Auckland	4 0 0	2 5 0
Dunedin (via Cook Strait)	5 10 0	3 5 0
Lyttelton " "	4 15 0	2 5 0
Napier (via Auckland)	5 10 0	3 5 0
Wellington	4 0 0	2 5 0
EUROPEAN PORTS.		
Antwerp	57 0 0	35 0 0
Bremen	57 0 0	35 0 0
Brindisi	£55 to £65	£32 to £37
Genoa	50 0 0	30 0 0
London	£60–£70	£35 to £44
Marseilles	65 0 0	£32 to £37
Naples	£50–£65	£30 to £37
Southampton	57 0 0	35 0 0
Venice	£55–£65	£32 to £37
EASTERN PORTS.		
Aden	45 0 0	£30 to £33
Bombay	40 0 0	£25 to £27 10s.
Calcutta	40 0 0	£25 to £27 10s.
Madras	40 0 0	£25 to £27 10s.
Colombo	35 0 0	£25 to £27 10s.
Hong Kong	33 0 0	23 0 0
Java	27 0 0	....
Penang	30 10 0	....
Port Moresby	22 10 0	14 0 0
Shanghai	37 10 0	26 0 0
Singapore	32 0 0	27 0 0
Mauritius	52 0 0	35 12 0
Port Said	£53–£63	£31 to £36
Reunion	51 0 0	35 0 0
Yokohama	37 10 0	26 8 0
PACIFIC PORTS.		
Aneityum	10 10 0	6 0 0
Fiji (Suva and Levuka)	10 0 0	6 0 0
Havannah Harbour (New Hebrides)	12 0 0	7 0 0
Honolulu	20 0 0	12 0 0
Noumea	12 0 0	7 0 0
Samoan Islands	20 0 0	10 0 0
San Francisco	40 0 0	16 0 0
Tonga Islands	16 0 0	9 10 0
Vancouver	40 0 0	16 0 0
SOUTH AFRICAN PORT.		
Cape Town	53 0 0	....

res by sailing vessels are in nearly every instance a matter of te arrangement between the captain of the vessel and the intending enger, but the number of such passengers is becoming smaller from to year owing to the great decrease in steamer fares. Fares from ey to London are, however, given as £35 to £45 first class, and £18 22 second class; and from Newcastle to San Francisco, as £20 to

he freights paid for the carriage of wool to London determine, in certain limits, the freight of most other produce. The present age cost of carriage of greasy wool to London is ⅜d. per lb.; in the average was somewhat over 3d. Information regarding hts is not available for early years, but since 1857, as the following figures show, the freights on pressed greasy wool have fallen 40 per . The freights are in every case for sailing ships, as the practice shipping wool by steamers was by no means general until very nt years.

Year.	Freight per lb.	Year.	Freight per lb.	Year.	Freight per lb.
1857	⅝d.	1871	⅝d.	1885	⅜d.
1858	⅜d.	1872	⅝d.	1886	⅜d.
1859	⅜d.	1873	⅝d.	1887	⅜d.
1860	⅝d.	1874	⅝d.	1888	7⁄16d.
1861	⅝d.	1875	⅜d.	1889	7⁄16d.
1862	⅝d.	1876	½d.	1890	7⁄16d.
1863	⅝d.	1877	⅜d.	1891	7⁄16d.
1864	⅝d.	1878	7⁄16d.	1892	11⁄32d.
1865	½d.	1879	½d.	1893	13⁄32d.
1866	⅝d.	1880	11⁄16d.	1894	13⁄32d.
1867	¾d.	1881	⅞d.	1895	11⁄32d.
1868	9⁄16d.	1882	⅜d.	1896	5⁄16d.
1869	½d.	1883	½d.	1897	⅜d.
1870	⅜d.	1884	⅜d.	1898	⅜d.

The following table of freights calls for no particular comme prices have remained fairly uniform for several years, except slightly affected by temporary causes :—

Year.	Vessel.	Per lb.	Per ton weight.			Per ton measurem (40 cubic feet	
		Wool (Greasy).	Tallow.	Leather.	Hides.	Preserved Meats.	Mea G
1888	Sailing	$\frac{5}{16}$d. to $\frac{7}{16}$d.	25/- to 45/-	30/- to 45/-	20/-	25/- to 30/-	25/-
	Steam	½d. to ⅝d.	30/- to 52/6	35/- to 50/-	....	30/-	[illegible]
1889	Sailing	$\frac{5}{16}$d. to $\frac{7}{16}$d.	25/- to 45/-	27/6 to 45/-	15/- to 20/-	22/6	30/-
	Steam	½d. to ⅝d.	25/- to 50/-	40/- to 60/-	....	....	....
1890	Sailing	⅜d. to ½d.	32/6 to 47/6	35/- to 45/-	15/- to 25/-	25/- to 30/-	25/-
	Steam	½d. to ⅝d.	35/- to 50/-	45/- to 60/-	....	30/-	[illegible]
1891	Sailing	⅜d. to $\frac{7}{16}$d.	26/- to 45/-	27/6 to 40/-	20/- to 30/-	17/6 to 25/-	22/6
	Steam	$\frac{5}{16}$d. to ⅜d.	32/6 to 45/-	32/6 to 50/-	30/- to 35/-	....	32/6
1892	Sailing	⅜d. to ½d.	27/6 to 37/6	27/6 to 40/-	15/- to 22/6	20/- to 27/6	27/6
	Steam	⅜d. to ½d.	45/- to 50/-	40/- to 60/-	35/-	32/6 to 40/-	40/-
1893	Sailing	$\frac{5}{16}$d. to ⅜d.	25/- to 40/-	25/- to 40/-	15/- to 22/6	15/- to 17/6	25/-
	Steam	⅜d. to ½d.	35/- to 50/-	35/- to 60/-	30/- to 40/-	30/-	40/-
1894	Sailing	⅜d. to $\frac{7}{16}$d.	32/6 to 37/6	32/6 to 40/-	17/6 to 20/-	17/6	25/-
	Steam	⅜d. to ½d.	40/- to 50/-	35/- to 50/-	30/-	25/- to 30/-	35/-
1895	Sailing	$\frac{5}{16}$d. to ⅜d.	17/6 to 35/-	30/- to 40/-	15/- to 22/6	15/- to 17/6	20/-
	Steam	⅜d. to ½d.	22/6 to 40/-	35/- to 65/-	27/- to 40/-	20/- to 30/-	30/-
1896	Sailing	[illegible]	[illegible]	[illegible]	15/- to 17/6	12/6 to 15/-	17/6
	Steam	[illegible]	12/6 to 35/-	27/6 to 45/-	25/- to 40/-	20/- to 30/-	20/-
1897	Sailing	[illegible]	[illegible]	[illegible]	15/-	12/6 to 15/-	9
	Steam	[illegible]	30/-	45/- to 50/-	.....	25/- to 27/6	27/-

COMMERCE

THE Collector of Customs administers affairs relating to Customs and Excise, and receives all revenue derived from the charges on shipping, with the exception of the fees of the Marine Board, and the moneys received from the public wharves. A Board, consisting of three Commissioners, exists for the purpose of determining disputes between the general public and the officers of the department, but its decisions may be disallowed by the Governor or appealed against to the Supreme Court, with final reference to the Privy Council.

The coasting trade of the colony may be conducted under one of two systems—either the captain of a vessel may obtain a document, called a "Transire," permitting his ship to engage in the local carrying trade for a period of three months, or he may enter the particulars of his cargo in a book kept for that purpose, and have the entries initialled at the Custom House every voyage. It is not necessary to pass entries for goods shipped from one part of the colony to another, although, of course, excisable articles are carried under a bond certificate. With regard to merchandise destined for or received from abroad, a different course of procedure is adopted. A declaration must be made to the Customs of the quantities and values of all imports, except such goods as have been brought into port for transhipment, of which only a description of the packages is entered, there being no law in existence requiring merchants to supply the quantities and values of such goods. Of articles which are subject to specific duties, the values declared by the importers are understood to be the values at the port of shipment, with packing, freight, insurance, and all other charges added. The declared values of the goods are checked, and, if found to be wrongly stated, amended by the Customs officials. Dutiable articles may be reintroduced to the colony under reintroduction certificates, which are issued by the Customs Department for the port or border station at which it is desired to reintroduce the goods. All goods seized by the Customs are submitted to auction sale, and if they do not realise the amount of duty leviable on them they are withdrawn and destroyed.

The entries for imports passed at the Customs do not in every case show the countries from which the goods have actually come, but usually the places at which they were shipped. This is an imperfection, accidental to all Customs statistics, which in the present method of conducting trade cannot be avoided. The desirability of recording the ctual place of origin is admitted, and the Customs officers go so far as o alter the entries when the nature of the goods clearly shows that bey have arrived from another country than the one stated. In like manner the exports of the colony are in many cases cleared for o countries than those for which they are ultimately destined, and i estimated that some £3,550,000 of goods in transit to Europe credited in the Customs to Victoria and South Australia.

Although goods transhipped at Sydney and other ports are included in the trade returns of the colony, in some of the provinces which they are forwarded they are treated as imports from New So Wales, and there is in consequence a discrepancy between the in change figures published in this colony and those of the other colo where the practice mentioned prevails. Dutiable articles carried vessels for use or consumption on board are, however, classed as exp here when the vessels clear, but no account is taken of goods on free list. The quantities and values of exports are not, as in the of the imports, obtained under declaration, but the Collector of Cust has power to adopt this form of procedure should he think it advis to do so. The values given in the returns represent the values of goods at the place of shipment in the colony, and are checked by Customs officers with the prices ruling from day to day in the markets.

INCREASE OF TRADE.

The value of goods imported into and exported from New South W has increased, during the seventy-two years over which the re extend, from £400,000 in 1825 to £45,495,422 in 1897. The y values have been somewhat uncertain in their increase, the imports 1840 to 1852 being especially erratic; but of late years the progre the colony, as evidenced by its trade, has been remarkably steady largest falling off in any year being that experienced in 1892. gross value of the exports from year to year, for the reasons here pointed out, forms the surest index of the progress of a country cir stanced like New South Wales, and the result of a rise or fall in value of the staple commodities, or of a depression in production, be readily traced in the corresponding rise or fall in the ex values. The amount of the trade of the colony, for the several pe shown, was

Year	Imports	Exports	Total Trade.	Year	Imports.	Exports.	Total
	£	£	£		£	£	£
1825	300,000	100,000	400,000	1891	25,383,397	25,944,020	51,3
1830	420,480	141,461	561,941	1892	20,776,526	21,972,247	42,74
1840	3,014,189	1,399,692	4,413,881	1893	18,107,095	22,921,223	41,0
1850	2,078,338	2,399,580	4,477,918	1894	15,801,941	20,577,673	36,3
1860	[illegible]	6,311,351	14,067,210	1895	15,992,415	21,934,785	37,9
1870	[illegible]	8,030,378	16,314,956	1896	20,561,510	22,010,349	43,5
1880	14,176,063	13,687,800	[illegible]	1897	21,744,350	23,751,072	45,4
1890	22,615,004	22,045,937	44,660,941				

wing table shows the value of the trade of New South each of the principal countries during the year 1897 :—

OUNTRIES.	Total Imports therefrom.	Exports thereto.			Total Trade.
		Domestic Produce or Manufacture.	Other Produce or Manufacture.	Total.	
OLONIES :—	£	£	£	£	£
	2,854,497	2,490,161	471,827	2,961,988	5,816,485
	4,467,867	600,259	742,063	1,342,322	5,810,189
lia	1,185,099	2,362,101	225,185	2,587,286	3,772,385
ralia	51,182	460,687	248,860	709,547	760,729
	414,209	55,095	131,839	186,934	601,143
	629,423	209,393	177,196	386,589	1,016,012
ustralasian Colonies	9,602,277	6,177,696	1,996,970	8,174,666	17,776,943
	7,557,069	6,550,124	2,178,704	8,728,828	16,285,897
Possessions :—					
inion	187,201	16,132	3,208	19,340	206,631
	132,940	5,586	537	6,123	139,063
	53,836	32,945	91,148	124,093	177,929
	76,468	28,530	146,905	175,435	251,903
	259,723	164,199	5,658	169,857	429,580
ents	14,196	27,501	650	28,151	42,347
	123,729	22,850	65	22,915	146,644
Possessions	8,393	34,017	22,518	56,535	64,928
ther British Possessions	856,576	331,760	270,689	602,449	1,459,025
IES :—					
	77,552	560,598	107,947	668,545	746,097
	187,646	2,568	30	2,598	190,244
	211,317	1,253,051	290,429	1,543,480	1,754,797
	900,464	740,590	139,850	880,440	1,780,904
	58,685	65,917	36,550	102,467	161,152
	69,615	42,258	16,194	58,452	128,067
	30,404	78,812	64,895	143,707	174,111
nds and New Hebrides	113,448	20,360	63,156	83,516	196,964
	1,887,877	961,185	1,501,134	2,462,319	4,350,196
Countries	191,420	272,624	26,981	299,605	491,025
oreign Countries	3,728,428	3,997,963	2,247,166	6,245,129	9,973,557
ral Total	21,744,350	17,057,543	6,693,529	23,751,072	45,495,422

otal trade shown above, nine-elevenths are sea-borne, the wo-elevenths comprising the overland trade with the three lonies of Queensland, South Australia, and Victoria. Nearly f the seaward trade is monopolised by the ports of Sydney stle, the trade of the other ports amounting to little more 00, and of this amount eight-ninths belong to Wollongong. ution of the overland trade is much more equal. The value of d trade with Victoria during 1897 was £4,018,670; that Australia came to £3,251,190; and the Queensland over- was worth £1,160,051. Wool and live stock form the bulk ic with Victoria and Queensland, and this was also the case Australia until the development in 1886 of the mines in district, when the chief elements of export became silver bullion, lead, and ore, and the imports, general merchandise for Br Hill. The appended table shows the trade of each of the ports border stations of the colony during 1897. Some of the latter— cannia and Bourke, for instance—are situated at a considerable dis from the actual border :—

Port or Station.	Imports.	Exports.			To Tr
		Domestic Produce or Manufacture.	Other Produce or Manufacture.	Total.	
	£	£	£	£	£
		SEAWARD.			
Sydney	17,302,514	10,915,441	6,523,151	17,438,592	34,74
Clarence River (Grafton)	....	10,040	....	10,040	1
Eden	288	7,173	....	7,173	
Newcastle	509,941	1,712,764	10,561	1,723,325	2,2
Port Macquarie	....	100	....	100	
Tweed River	315	39	306	345	
Wollongong	....	72,878	....	72,878	7
Total ...£	17,813,058	12,718,435	6,534,018	19,252,453	37,0
		OVERLAND.			
Albury	1,406,277	530,619	39,531	570,150	1,97
Barringun	70,851	11,311	6,483	17,794	8
Boggabilla	112,953	43,876	....	43,876	15
Bourke (Inland)	3,761	23	2,879	2,902	
Brewarrina (Inland)	....	....	95	95	
Cobram	23,664	38,111	369	38,480	6
Corowa	79,184	200,547	6,078	206,625	2
Delegate	......	25,776	....	25,776	2
Euston	4,082	26,835	5	26,840	3
Howlong	7,582	9,332	......	9,332	1
Moama	245,471	438,336	6,858	445,194	6
Mulwala	68,606	144,676	58	144,734	2
Mungindi	43,412	....	....	....	4
Swan Hill	17,752	339,269	....	339,269	3
Tocumwal	54,063	147,695	9,196	156,891	2
Tweed Heads	9,156	.....	....	....	
Wallangarra	326,807	50,218	5,339	55,557	3
Wentworth	55,412	379,897	531	380,428	4
Wilcannia (Inland)	41,686	...	30	30	4
Willyama (Broken Hill)	1,022,310	1,912,849	82,057	1,994,906	3,0
Other Crossing places (Live Stock)	338,763	39,738	.	39,738	3
Total ...£	3,931,292	4,339,108	159,511	4,498,619	8,4
Grand Total £	21,744,350	17,057,543	6,693,529	23,751,072	45,4

TRADE OF AUSTRALASIAN COLONIES.

trade of New South Wales is larger than that of any of the other es of Australasia, but it is exceeded by the commerce of Western alia and South Australia in value per head of population. The trade of each colony for 1880, 1890, and 1897 is shown in the ing table, and the magnitude of the business transacted, not only is colony but by the rest of the group, is very suggestive. It will en that the trade of Victoria ranks second in value, and that of her colonies in the following order :—New Zealand, Queensland, Australia, Western Australia, and Tasmania.

Colony.	1880.	1890.	1897.
	£	£	£
New South Wales	29,858,865	44,660,941	45,495,422
Victoria	30,511,453	36,220,237	32,194,152
Queensland	6,535,456	13,621,212	14,520,748
*South Australia	11,156,003	17,328,301	14,347,836
Western Australia	852,852	1,546,260	10,358,663
Tasmania	2,881,154	3,384,504	3,112,069
New Zealand	12,514,703	16,072,245	18,072,216
Australasia	94,310,486	132,833,700	138,101,106

* Including Northern Territory.

IMPORTS.

n 1897 the gross value of goods imported into the colony amounted £21,744,350, or at the rate of £16 11s. 10d. per head, while the orts for home consumption were valued at £15,050,821, or £11 9s. per head of population—showing an increase on the previous year of . 6d. per head in the gross imports, and of 7s. 7d. per head in the net orts. In 1891 the gross imports averaged £22 3s. 11d. and the orts for home consumption, £18 19s. 9d. ; but from that year the es per head of population steadily declined until 1895, when they hed the lowest point on record since the colony was restricted to present boundaries thirty-six years before. The falling off was due wo chief causes—first, to the large diminution in public and private owings ; and, second, to the fall in prices, which has extended to ly all the commodities that the colony imports. In 1896, however, average value of imports per head of population rose to £11 2s., being nsiderable advance on the figures of the preceding three years, and 897 the improvement continued, the value reaching £11 9s. 7d., as before stated. The course of the import trade since 1870 may b in the following table:—

Year.	Imports for home consumption per head.	Total Imports per head.	Year.	Imports for home consumption per head.	Total pe
	£ s. d.	£ s. d.		£ s. d.	£
1870	12 7 8	15 16 6	1890	16 0 8	20
1875	19 14 10	23 9 11	1891	18 19 9	22
1880	15 4 9	19 9 0	1892	13 19 2	17
1885	18 19 8	25 12 0	1893	10 2 11	14
1886	16 2 3	21 19 8	1894	8 19 11	12
1887	13 10 8	19 1 7	1895	8 6 0	12
1888	13 16 2	20 9 11	1896	11 2 0	15
1889	16 3 10	21 8 9	1897	11 9 7	16

In order to show clearly the nature of the goods imported i colony, the imports in 1897 have been classified under certain heads, as appended. It should be explained that the import and coke, amounting to £105,270, consisted almost entirely required for smelting purposes at Broken Hill:—

Classification.	Total Imports.	Imp h consu
	£	
Food and beverages, including breadstuffs	3,338,200	2,8
Wines, fermented and spirituous liquors	741,390	6
Live stock	906,923	7
Animal and vegetable products, including wool ...	3,279,967	1,6
Clothing and textile fabrics	4,248,257	3,9
Minerals and metals, raw or partly worked up, including silver bullion, lead, and ore	1,273,980	1,0
Coal and coke	105,270	1
Specie and gold bullion	3,220,103	1
Articles of education, art, amusement	1,142,616	9
Manufactured articles not elsewhere included	2,899,505	2,4
Unclassified articles	588,139	4
Total value ....£	21,744,350	15,0

be seen that the colony imported food and drink for its own ion to the value of £3,509,229, or at the rate of £2 13s. 7d. for bitant, and manufactured goods to the amount of £7,304,548, rate of £5 11s. 6d. per head of population, together representing d., out of a total of £11 9s. 7d. The principal items of the are live stock, animal and vegetable products, minerals and aw or partly worked up, and articles of education, art, etc. Of al and vegetable products, and the minerals and metals, some is worked up in the colony for local requirements; but the portion of the gold imported is treated at the Mint, and re- in the shape of coin. The value per head of some of the l articles imported for home consumption during the last five given below :—

Articles.	1893.	1894.	1895.	1896.	1897.
	s. d.	s. d.	s. d.	s. d.	s. d.
—Wearing, and gloves ……	12 9	12 10	13 9	15 1	15 5
ale ……………………	4 5	3 11	3 4	3 9	4 1
d shoes……………………	5 7	4 4	4 3	5 4	4 3
……………………………	25 1	23 9	28 0	28 0	22 10
ulse, etc.—					
……………………………	3 8	3 4	2 3	7 7	8 4
……………………………	1 3	0 5	0 11	7 11	2 6
……………………………	2 6	1 1	1 2	1 6	1 3
re ……………………………	5 1	2 4	2 8	3 4	3 10
steel—					
actured wrought …………	2 10	2 5	3 3	4 1	4 4
black and galvanized) ……	1 7	1 5	1 2	1 11	2 6
ized sheets and bars………	2 7	2 10	2 0	2 5	2 10
k—					
d cattle ……………………	8 0	4 9	4 2	7 8	5 10
……………………………	1 10	1 9	1 3	1 3	1 8
……………………………	5 0	3 2	2 3	4 8	4 6
ry …………………………	2 4	2 0	2 5	6 1	6 0
oks, etc.………………	5 5	5 0	5 7	4 9	5 7
……………………………	5 7	4 8	4 7	4 8	4 10
……………………………	5 9	8 5	6 5	7 2	7 2
……………………………	4 10	5 1	4 6	3 4	4 0
ressed and rough) ………	5 2	4 6	4 7	4 11	6 2
cigars, and cigarettes ……	2 3	1 10	2 8	2 6	3 0

The import of drapery stands first in the list of values wearing apparel be added the value of these goods represented a £1 18s. 3d. per head of population in 1897. The highest values by drapery and wearing apparel were in 1882, when they a almost £5 for every inhabitant. In 1897 iron and steel, ma and hardware combined represented 19s. 6d. per head of pop wheat and flour, 10s. 10d.; intoxicants, 9s. 8d., of which the spirits was 4s. 10d., of beer 4s. 1d., and of wine, 9d.; sugar, tea, 4s.; paper, books, etc., 5s. 7d.; and boots and shoes, None of the other values reach such large figures except those stock and timber, though many other articles form individua important items. Two things are plain from a consideration table—the great purchasing power of the people, though now reduced compared with what it was ten years ago, and the gre existing for the production of goods which are now imported, the extension of manufactures within the colony. This will, be seen more clearly from the gross values of some of the articles imported during the year 1897, which are given in the table:—

Apparel, Wearing	£1,216,412	Live stock	
Arms and ammunition	153,449	Malt and hops	
Beer	291,042	Matches	
Boots and shoes	303,579	Milk, Condensed	
Butter	120,885	Musical instruments	
Candles	51,112	Oils—mineral and vegetable	
Chaff and hay	213,466	Paints, paperhangings, lampware	
Cement	80,642	Paper, books, stationery etc.	
Cutlery and grindery	79,525	Pickles, sauces, and oilmen's stores	
Drapery	2,280,023	Potatoes and other vegetables	
Drugs and apothecaries' ware	200,336	Saddlery and harness and saddler's ware	
Fancy goods and toys	175,279	Silver plate and ware	
Fish, Preserved	126,407	Skins and hides	
Flour	624,208	Spirits	
Fruit, Bottled, dried, and green	383,201	Sugar	
Furniture and upholstery	103,682	Tea	
Glass and glassware	86,982	Timber	
Grain and pulse	474,775	Tinplates	
Hardware	302,495	Tobacco, cigars, and cigarettes	
Iron and iron manufactures and machinery	1,435,483	Watches and clocks	
Jams and jellies	21,752	Wine	
Jewellery and precious stones	133,383		
Leather	75,143		

alues of the imports into New South Wales, classed under the
untries of origin, for 1870 and subsequent periods ending with
ere as undernoted :—

	United Kingdom.	Australasian Colonies.	Other British Possessions.	Foreign States.	Total.
	£	£	£	£	£
	3,200,706	3,677,927	573,462	832,283	8,284,378
	6,062,226	5,878,751	867,252	926,904	13,735,133
	6,536,661	5,945,788	539,334	1,154,280	14,176,063
	11,885,597	8,595,429	818,689	2,437,746	23,737,461
	10,445,980	8,085,584	621,507	2,160,056	21,313,127
	7,998,568	9,017,035	549,345	1,606,369	19,171,317
	9,212,981	9,085,567	736,224	2,194,505	21,229,277
	8,736,478	10,647,312	814,718	2,664,549	22,863,057
	8,628,007	10,981,721	663,325	2,341,951	22,615,004
	10,580,230	11,127,178	766,947	2,909,042	25,383,397
	8,883,983	9,201,193	577,707	2,113,643	20,776,526
	7,218,124	8,895,787	565,491	1,427,633	18,107,035
	5,983,489	7,794,168	608,356	1,415,928	15,801,941
	6,420,107	7,321,668	611,021	1,639,619	15,992,415
	7,190,115	9,559,860	625,164	3,186,371	20,561,510
	7,557,069	9,602,277	856,576	3,728,428	21,744,350

question of the trade with different countries will be returned to
n in this chapter. It may here be pointed out that the Customs
do not enable goods to be traced to their place of origin, but
to the place where they were shipped. A greater trade is main-
by the colony with foreign States than would appear from the
ng table, as a large proportion of the products of some of those
ies is sent to Australia by way of Great Britain. The imports
n as coming from the other Australasian colonies include the
and foreign goods introduced into New South Wales overland
of Victoria and South Australia.

EXPORTS.

xport trade of New South Wales, like the import, is greater than
any other Australasian colony. In consequence of the large
f capital, representing not only the borrowings of the State,
money received for private investment, the imports formerly
d the exports in value; but since 1890, with diminished borrow-
is condition of things has been reversed, and there is now a
xcess of exports, which it is necessary to send away in order to
e annual interest-charge upon the colony, and the return from
ents. The excess of exports was sufficiently large to meet this
in the three years 1893–95, but in 1896 and 1897 a further
f capital in excess of withdrawals reduced the difference between

the export and import values. This interesting question is dis farther on, in connection with the increase in production ; but i here be added that during the last seven years the excess of e over imports ranged from £560,623 in 1891 to £5,942,370 in 18 amount in 1897 being £2,006,722. Compared with those of colonies, the extent of the New South Wales exports of home p is satisfactory, as will be evident from the subsequent table, shows the total export trade in domestic produce, and the amou head of the population, for each of the Australasian colonies in t 1897. In point of value per head of population, New South is, of course, surpassed by Western Australia and Queensland, the proportion of adult males is very much higher; and it will b that during the year 1897 the mother colony was also exceed New Zealand :—

Colony.	Total Exports of Domestic Produce.	Per head of Population.
	£	£ s. d.
New South Wales	17,057,543	13 0 4
Victoria	12,829,394	11 1 8
Queensland	8,831,450	18 9 2
South Australia	2,625,172	7 5 2
Western Australia	3,218,569	21 9 4
Tasmania	1,721,959	10 3 11
New Zealand	9,596,267	13 6 0
Australasia £	55,880,354	12 15 11

There is a defect in these figures, so far, at least, as two of the co are concerned. Victoria and South Australia have each a large re- trade, especially in raw produce, and it frequently happens that cr taken for the produce of other colonies in the returns showing their e of home produce. New South Wales was formerly over-credited gold received from Queensland for coinage, and is still, to some e with tin and copper imported from Queensland, South Australi Tasmania, and with cattle from the northern colony. To what e the Customs value of home produce is overstated in Victoria and Australia is unknown, but much of the New South Wales p passing through Victoria for shipment to England is export Victorian produce, especially wool, of which large quantities s from the neighbouring colony as home produce are really the prod of New South Wales. In Victoria an attempt is now made to the returns, but there is still an overstatement. How far the s obtains in other directions it is impossible to say.

Dividing the exports of New South Wales into two classes— which are the produce and manufacture of the colony, and those im from other countries—the preponderance of home produce exp y marked. The value of the domestic exports in 1897 was nearly e as great as in 1873 ; and, speaking generally, the expansion during intervening period of twenty-four years has been of a steady character. l constitutes the largest item of domestic export, and any fluctua- in the production or market value of the staple is plainly marked the whole trade. The decline in the value of domestic exports een 1880 and 1886, which the following table shows, was to a great t due to the fall in the price of wool, and to the losses brought t by a succession of dry seasons. The exports of produce other n that of the colony also show a decline about this period, ascribable part to the causes which affected the general exports, and to the blishment of direct communication between Great Britain and ensland and Tasmania; but the lost ground has been more than overed :—

Year.	Domestic produce exported.		Other produce exported, including gold.	Total Exports.
	Gold.	Commodities.		
	£	£	£	£
1873	1,962,094	7,694,202	3,108,578	12,764,874
1874	577,789	8,408,483	3,471,703	12,457,975
1875	635,448	9,374,156	3,787,793	13,797,397
1876	368,464	9,102,099	3,590,849	13,061,412
1877	663,552	8,880,570	3,913,778	13,457,900
1878	609,121	9,016,558	3,508,726	13,134,405
1879	....	10,079,317	3,052,614	13,131,931
1880	....	12,007,931	3,674,871	15,682,802
1881	710,412	11,244,865	4,352,528	16,307,805
1882	566,516	12,623,435	4,487,404	17,677,355
1883	502,517	15,625,835	4,133,921	20,262,273
1884	73,593	13,989,634	4,514,063	18,577,290
1885	71,539	11,987,741	4,690,827	16,750,107
1886	24,918	11,558,311	4,134,708	15,717,937
1887	34,184	14,206,128	4,281,438	18,521,750
1888	165,540	15,516,852	5,237,738	20,920,130
1889	321,731	17,378,662	5,594,541	23,294,934
1890	137,169	17,095,556	4,813,212	22,045,937
1891	1,296,093	19,789,619	4,858,308	25,944,020
1892	11,486	17,695,616	4,265,145	21,972,247
1893	25,885	17,068,328	5,827,010	22,921,223
1894	325,302	15,579,659	4,672,712	20,577,673
1895	1,063,558	15,372,652	5,498,575	21,934,785
1896	1,699,549	15,043,142	6,267,658	23,010,349
1897	1,725,940	15,331,603	6,693,529	23,751,072

The value of New South Wales produce exported during 1891 ply exceeded that of any other year. A portion of the trade ild have been transacted in 1890 if the maritime strike had occurred; but, after allowing freely for the increase due to this umstance, the value is still the largest in the history of the colony. The table just given shows a notable rise in the val domestic produce exported during 1889, which was well sust until 1893. This may be attributed in the first place to a fort succession of good seasons, and in the second to the production of which became an important article of export in the year named. large decrease in 1894 is fully accounted for by the fall in pric depression preventing such increased production as would have ha effect of sustaining the total export value. In 1895 and 1896 was a further slight fall, although the average price of the comm produced in the colony was higher than in 1894; but although in 1897 were not so good as in 1896, the value of the domestic was greater, not only in the total amount, but in the average per of population.

In the presentation of the figures relating to the export trade, it be seen that the value of commodities has been separated from th gold, the export of gold the produce of the colony being taken to b excess of the total export of coin over the total import of coin bullion. Where there was no such excess the whole of the gold exp has been classed as other than domestic produce. Below will be the value of the trade per inhabitant, the subdivision being the sa that adopted in the previous table:—

Year.	Domestic produce exported.						Other produce exported, including gold.			Total Exp		
	Gold.			Commodities.								
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d
1873	3	12	1	14	2	7	5	14	2	23	8	
1874	1	0	6	14	18	0	6	3	0	22	1	
1875	1	1	9	16	0	8	6	9	7	23	12	
1876	0	12	3	15	1	3	5	18	10	21	12	
1877	1	1	1	14	2	5	6	4	6	21	8	
1878	0	18	6	13	14	2	5	6	8	19	19	
1879	....			14	11	10	4	8	5	19	0	
1880	....			16	9	7	5	0	10	21	10	
1881	0	18	7	14	13	11	5	13	10	21	6	
1882	0	14	2	15	16	2	5	12	5	22	2	
1883	0	12	0	18	12	10	4	18	8	24	3	
1884	0	1	8	15	16	10	5	2	2	21	0	
1885	0	1	7	12	18	7	5	1	2	18	1	
1886	0	0	6	11	18	6	4	5	3	16	4	
1887	0	0	8	14	2	9	4	5	3	18	8	
1888	0	3	2	14	19	8	5	1	2	20	4	
1889	0	6	0	16	5	11	5	4	11	21	16	
1890	0	2	6	15	10	4	4	7	4	20	0	
1891	1	2	8	17	6	1	4	5	0	22	13	
1892	0	0	2	14	19	7	3	12	2	18	11	
1893	0	0	5	14	2	0	4	16	4	18	18	
1894	0	5	3	12	11	10	3	15	6	16	12	
1895	0	16	10	12	3	2	4	6	11	17	6	
1896	1	6	5	11	13	7	4	17	4	17	17	
1897	1	6	4	11	14	0	5	2	2	18	2	

by the volume of its exports per inhabitant, New South mpares favourably with any other country whose commerce considerable, as an export of from £16 to £24 can only be l by some few countries, such as Belgium, whose trade is ade up of re-exports. For the twenty-five years covered by the statement the exports per inhabitant averaged £19 17s. 8d., low as £16 4s. 3d. in 1886, and reaching £24 3s. 6d. in 1883. g, however, all but domestic produce, the average value of ies exported was £14 8s. 1d. per inhabitant, and including lly produced, £14 19s. 10d. If the prices of commodities had constant from year to year, the value of domestic exports would ded a ready means by which the progress of productive enterprise gauged. Allusion has been made on several occasions in this o the fall in the prices of the great staple exports, and taking odities into consideration, the fall during the last twenty-four been over 46 per cent., the most serious decline having taken ce the year 1884. As the question of prices is reviewed at ewhere in the chapter on "Food Supply and Cost of Living," re suffice to give the price-levels for various years which are ablished, with the remark that present indications point to ices for some time to come :—

r.	Price-level. 1897 prices=1,000.	Year.	Price-level. 1897 prices=1,000.
3	1,862	1886	1,390
4	1,846	1887	1,428
5	1,840	1888	1,386
6	1,743	1889	1,408
7	1,598	1890	1,360
8	1,591	1891	1,236
9	1,652	1892	1,170
	1,621	1893	1,059
	1,609	1894	955
	1,661	1895	979
	1,661	1896	1,029
	1,647	1897	1,000
	1,446		

ng the figures just given to the value of commodities as d on page 132, and adding the value of locally-won gold the comparative value of domestic exports for each year is

It will be seen that although during the twenty-eight years cov by the tables the annual export of domestic produce has risen f £7,874,800 to £16,745,500, in value per head of population it was less in 1895-97 than during the period extending from 1870 to 1874. T average sum paid by the colony to its outside creditors has incre from £1,806,800 to £4,760,700 per year, or from £3·5 to £3·7 per h The surplus available to pay for imports has risen from £6,068,000 £11,984,800. Presented as the average per inhabitant, the amo shows a decrease from £11·5 to £9·3; but when stated in terms of prices obtained in 1870-74, the excess of exports per head shows increase of more than 44 per cent.—that is to say, from £11·5 to £1 per head.

It will be gathered from the foregoing figures that in spite of the la and increasing amount which the colony owes to its outside credito and the great fall in prices, the export of domestic produce available t pay for imports shows but little decline, while if prices had remain stationary during the whole period there would have been an increa during the last three years as compared with the first five years of £5·2 p head. The natural satisfaction to which the figures give rise extends t the whole period with the exception of the five years from 1885 to 18 An interesting question has been raised as to the effect of the imp of British capital on the productive enterprises of the country. T figures available in regard to production do not enable a comparison t be made for the whole period from 1870 to the present time, but maki use of the export figures already quoted, and those given in the pa dealing with "Private Finance," the following comparison is obtained:-

Period.	Average Export of Domestic Produce per annum.			Average Import of Capital per annum.	
	Total.	Per inhabitant		Total.	Per inhabitant.
		At actual prices	At 1870-74 prices.		
	£	£	£	£	£
1870-74	7,874,800	15·0	15·0	921,200	1·8
1875-79	9,745,900	15·4	16·4	2,966,200	4·7
1880-84	13,468,900	16·8	18·4	4,170,800	5·0
1885-89	14,253,100	14·2	18·0	6,482,400	6·5
1890-94	17,804,930	15·2	23·6	2,981,800	2·5
1895-97	16,745,500	13·0	23·3	1,452,000	1·1

The average value of domestic exports, when reduced to the compa tive basis of 1870-74 prices, shows £23·3 per head in 1895–97 as agai an average of £15 in 1870–74, being an increase of more than 55 per ce The five years which ended with 1879 show an average export of £1 per head, which is equal to £16·4 on the 1870–74 prices; the f years ended 1884 show £16·8 per head, equal to £18·4 on 1870–74 prices; the five years ended 1889 show £14·2 per he purchase of goods, which come to the colony as imports. The of the last two columns will presently appear :—

d.	Average Exports of Domestic Produce per annum.	Average sum paid per annum as Interest on Loans raised in England and as Earnings of Investments held by non-residents.	Excess of Exports of Domestic Produce over Interest on Loans and Earnings of Investments by non-residents.
	£	£	£
-74	7,874,800	1,806,800	6,068,000
5-79	9,745,900	1,883,400	7,862,500
0-84	13,468,900	2,289,000	11,179,900
5-89	14,253,100	3,838,000	10,415,100
0-94	17,804,900	5,163,900	12,641,000
5-97	16,745,500	4,670,700	11,984,800

th the exception of the three years 1895–97, the figures just given a continuous increase in the exports from period to period, not-tanding the great fall in prices which has taken place. Against may be urged that there has been an increase in population, and in that the comparison may be exactly on the same lines the following has been compiled. The figures show the export of domestic ce per head, as well as the average sum paid as interest on loans in England and as earnings of investments held by non-residents, cess of domestic exports over interest on loans and earnings of tee capital, and the last figures reduced to the level of 1870–74 :—

iod.	Average Exports of Domestic Produce per annum.	Average sum paid per annum as Interest on Loans raised in England and Earnings of Investments held by non-residents.	Excess of Exports of Domestic Produce over Interest on Loans and Earnings of Investments held by non-residents.	Excess of Exports reduced to the common level of 1870-74 prices.
	£	£	£	£
-74	15·0	3·5	11·5	11·5
79	15·4	3·0	12·4	13·2
84	16·8	2·7	14·1	15·4
9	14·2	3·8	10·4	13·2
4	15·2	4·4	10·8	16·7
7	13·0	3·7	9·3	16·7

seasons were unpropitious, and the export fell from 331,774,424
258,514,280 lb. in 1897. There was, however, a slight rise in the
during this period, and the values were, therefore, not reduced
corresponding extent.

A marked feature of the wool trade is the growing dispositi
buyers on the Continent of Europe to purchase their supplies d
from the colony instead of obtaining them through the London bro
Year by year the representatives of foreign manufacturers who
Sydney for the purpose of attending the wool sales become
numerous. Eighteen years ago all the wool destined for Europe
be said to have found its way to London, while in 1897 the ship
of the staple of local growth to Belgium, France, Germany, Italy,
Austria amounted to 76,443,419 lb., valued at £2,409,710. The gr
of a direct trade with the Continent is desirable, both in the inter
the foreign consumer and of the grower, as the profit of the middle
as well as the cost of additional carriage and handling, is thereby
The following table shows the increase in the quantity of domestic
shipped direct to the Continent during the past thirteen years:—

Year.	Quantity.		Value.
	Weight.	Proportion of Total Domestic Export.	
	lb.	per cent.	£
1885	14,734,724	8·8	486,693
1886	17,307,973	9·9	537,472
1887	22,009,275	10·2	715,084
1888	29,023,106	12·2	906,526
1889	35,933,721	13·7	1,285,494
1890	42,300,222	17·9	1,509,686
1891	64,207,855	19·3	1,838,740
1892	85,334,191	27·3	2,568,685
1893	88,858,560	27·9	2,629,322
1894	98,316,430	29·7	2,627,658
1895	91,320,974	30·7	2,688,846
1896	73,175,615	26·9	2,372,729
1897	76,443,419	29·6	2,409,710

Besides the clip of the colony, there is a large export from New
Wales ports of other wool, chiefly the produce of Queensland. In
the export of foreign wool amounted to slightly more than 10,000,0
weight, valued at £429,399; but the returns for the next six
showed a great decrease from these figures. In 1892 the export
exceeded 10,000,000 lb.; and thenceforward it increased by leap
bounds, reaching 34,791,096 lb. in 1896, although the following
saw a decline in the quantity shipped, due to the dry season.
exports as returned by the Customs are given below; but the quan
in some of the earlier years fall short of the actual amounts, as
little wool, the produce of other places, was exported as New

ool—on the same principle, probably, that led to the shipment
from Melbourne, as the produce of Victoria, of over 17,000,000 lb.
the bulk of which was grown in New South Wales :—

Weight.	Value.	Year.	Weight.	Value.
lb.	£		lb.	£
7,614,490	431,605	1891	8,803,662	276,962
10,221,766	429,399	1892	10,826,721	328,691
4,664,971	173,380	1893	26,200,018	774,850
7,844,867	288,916	1894	22,391,022	616,333
7,407,309	268,739	1895	32,544,571	1,017,354
4,375,545	164,434	1896	34,791,096	1,120,803
7,415,438	241,276	1897	27,283,445	896,392

other products of the pastoral industry form an export of con-
le value. The shipments of tallow, hides and skins, and leather
n in the following table, commencing with the year 1891 :—

Year.	Tallow.		Hides and Skins.	Leather.
	Quantity.	Value.		
	cwt.	£	£	£
1891	304,200	304,599	487,177	137,293
1892	423,306	432,322	691,261	178,215
1893	657,870	744,331	615,365	195,173
1894	847,236	890,691	407,122	230,917
1895	794,920	773,105	611,504	279,281
1896	404,054	353,566	339,474	324,989
1897	485,102	400,121	466,664	292,220

number and value of the live stock exported have varied con-
ly from year to year, being affected greatly by the seasons
nced both in this colony and in the neighbouring provinces.
ort of horses has increased both in number and in value ; and the
ay be said of the imports, though it should be borne in mind
e figures in respect of horses are to some extent misleading, as the
of thoroughbred racing animals carried between Sydney and
rne, which are entered as exports and imports, gives more
nce to the trade than its magnitude really warrants.

397 the export of horned cattle declared to be the produce of New
Wales amounted to 45,409 head, valued at £184,014, and the
to 155,114, valued at £454,671. The export of sheep during the
s 998,464, worth £381,387 ; and the import reached 1,171,794
ber, and in value, £327,360. But, as in the case of horses, the
for the export and import of other live stock are to a certain
misleading, inasmuch as the returns are swollen by the inclusion

of stock sent from one colony to another in the hope of obtaining pasturage, or for fattening or breeding purposes. The general ter of the trade in 1897 may, however, be gathered from the table the export figures comprising both home-reared and other stock :-

Live stock.	Imported.		Exported.	
	Number.	Value.	Number.	Value.
		£		£
Horses	7,885	114,264	8,819	169,069
Horned cattle	155,114	454,671	59,608	255,711
Sheep	1,171,794	327,360	1,022,295	411,354
Pigs	5,200	6,425	6,392	9,691
Other stock	... .	4,203	....	2,161
Total	....	906,923	....	847,986

Shipments of the principal minerals are also made on an impo scale. Coal forms one of the staple exports of New South Wale quantity shipped in 1897 reaching 2,676,623 tons, valued at £95 This quantity is the largest which has so far been shipped in an year. The development of the coal trade of the colony is traced i chapter on "Mines and Minerals," and it is unnecessary to pursu subject further here.

The export of silver and silver-lead ore has become important 1884, the value for 1893 amounting to £3,031,720, although, in quence of the great fall in the price of the metal, due to the closi the Indian mints and the stoppage of purchases by the United Government, the value of the export has greatly declined, being £1,698,239 in 1897. There has, however, been a revival in co mining, the export of domestic copper being valued at £283,1 1897—by far the best result since the year 1884. Fifteen year the industry contributed about half a million to the exports o colony; but there was a steady decline from 1883 to 1894, whe value of the shipments of locally-produced copper was only £6 The rise in the price of the metal has given the industry a grati fillip: but tin-mining, which was even of greater importance copper-mining in the eighties, still languishes, the domestic exp 1897 being valued at but £49,900. In this branch of the m industry also, however, an improvement may be expected, in vi the great advance in the price of the metal in the beginning of According to the Customs returns, the export of New South copper and tin in 1897 was £300,680 and £70,688 respectively these figures require adjustment, being swollen by ore from colonies, particularly from Queensland and South Australia, sent refined in New South Wales.

old bullion and specie form one of the most important exports of the ny. The export during 1870 and subsequent periods was as shown ow :—

Year.	£	Year.	£
1870	1,824,524	1890	2,289,022
1875	2,106,074	1891	3,732,894
1880	863,012	1892	2,263,661
1885	1,461,478	1893	2,995,777
1886	1,619,278	1894	2,308,264
1887	1,318,917	1895	3,145,557
1888	2,122,337	1896	3,886,490
1889	3,211,747	1897	4,755,385

Taken by itself, the foregoing statement might seem to favour the nion sometimes hazarded that the colony is being denuded of its d. Such, however, is not the case. The gold shipped is chiefly the oduce of other colonies, sent to Sydney to be minted. The amount gold raised in the colony during 1897 was valued at £1,088,413, ile the domestic bullion and specie exported is estimated at ,725,940. This, however, was an exceptional year; usually only a ited quantity of the amount exported is of local production.

Divided into the classes adopted for the imports, the exports of home oduce in 1897 appear as follow :—

	£
Food and beverages, including breadstuffs	1,549,335
Wines, fermented and spirituous liquors	9,047
Live stock	739,372
Animal and vegetable products, including wool	9,504,610
Clothing and textile fabrics	37,646
Minerals and metals, raw or partly worked up, including silver bullion, lead, and ore	2,279,027
Coal and coke	979,577
Specie and gold bullion	1,725,940
Articles of education, art, and amusement	18,265
Manufactured articles not included elsewhere	174,278
Unclassified articles	40,446
Total	£17,057,543

By far the larger portion of the exports consists of raw materials. s a country manufacturing for export New South Wales has not yet hieved any position; and though its manufactures are not without eir importance, as will hereafter appear, its own markets furnish so ide a scope for manufacturing industry as to make it improbable that ere will be any great development of export trade in home manufactures the immediate future. So many channels have been presented for e successful employment of capital that little attention has been stowed upon the possibility of New South Wales supplying other untries with its own manufactures; but as these outlets of capital e closed, the vast possibilities of the country in other directions will ubtless be recognised. The following table has been prepared with e view of showing the relative importance, and the value per head of population, of the principal articles exported during the last years. The preponderance of raw material, and raw material adva one stage towards the finished manufacture, is apparent:—

Article.	1893.		1894.		1895.		1896.		1897.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Butter	2	1	2	5	0	11	1	7	4	0
Coal and coke	13	7	13	2	12	4	14	0	14	11
Copper	1	0	1	2	2	3	3	1	4	7
Fruit (Green)	2	3	1	8	1	1	1	7	1	4
Grain, pulse, etc.—										
Wheat	......		......		......		1	1	4	3
Maize	.....		......		0	1	0	1	0	2
Flour	0	3	0	1	0	2	3	0	5	1
Leather	3	3	3	9	4	5	5	1	4	5
Live stock—										
Cattle	3	3	1	9	1	10	2	4	2	10
Horses	1	8	1	6	1	6	1	11	2	6
Sheep	4	9	4	9	4	6	3	9	5	10
Meat	5	2	6	10	11	2	9	4	7	7
Shale (kerosene)	1	4	0	10	1	3	0	6	0	8
Silver bullion, lead, and ore	50	1	36	8	26	1	27	9	25	11
Skins and hides	10	2	6	7	9	8	5	3	7	2
Tallow	12	3	14	5	12	3	5	6	6	1
Timber (dressed and rough)	0	7	0	5	0	8	0	8	0	11
Tin	3	9	3	0	2	2	1	7	1	1
Wool	159	10	145	8	141	8	136	4	122	5

The total values of some of the principal articles of home prod exported during 1897 were as follow:—

	£		£
Butter	253,725	Meat	495,211
Coal and coke	979,099	Shale, Kerosene	44,511
Copper (net export)	283,174	Silver and ore	1,698,230
Flour	335,414	Skins	466,664
Fruit	90,223	Tallow	400,121
Grain and pulse	341,005	Timber	59,786
Leather	292,220	Tin (net export)	49,900
Live stock	739,372	Wool	8,023,893

RE-EXPORT TRADE.

The re-export trade of the colony increased considerably until 1 but during the next few years a marked decline was experienced. 1895, however, an improvement was manifested, and this has conti the re-exports in 1897 being much higher than in any previous The shipping facilities of Sydney at one time attracted to the p large amount of trade from New Zealand, Queensland, and the

transhipment to Europe; but the establishment of direct
cation between those colonies and Europe checked to some
he expansion of the re-export trade. The re-export trade
is comparatively limited, amounting in 1897 to £159,511,
total of £6,693,529. The total value of the re-exports of the
nd the value of the gold bullion and specie included therein,
he periods mentioned, were as shown below. It will be seen
d, consisting largely of Queensland metal coined at the Mint,
ped to London and the United States by the banks, forms a
oportion of the trade:—

Re-exports.			Gold Bullion and Specie included in the foregoing.
Seaward.	Overland.	Total.	
£	£	£	£
2,886,267	8,210	2,894,477	1,491,893
3,783,785	4,008	3,787,793	1,459,057
3,626,991	47,880	3,674,871	838,115
4,525,883	164,944	4,690,827	1,448,534
3,999,328	135,380	4,134,708	1,588,756
4,120,184	161,254	4,281,438	1,278,162
4,684,752	552,986	5,237,738	1,944,327
5,222,288	372,253	5,594,541	2,880,883
4,626,606	186,606	4,813,212	2,289,022
4,567,759	290,549	4,858,308	2,436,801
4,145,912	119,233	4,265,145	2,263,661
5,191,249	635,761	5,827,010	2,969,892
4,518,505	154,207	4,672,712	1,982,962
5,047,623	450,952	5,498,575	2,081,999
6,030,541	237,117	6,267,658	2,186,941
6,534,018	159,511	6,693,529	3,029,445

llowing table shows the value of the principal articles of other
estic produce and manufacture exported during 1897:—

	£		£
Wearing	34,100	Iron and steel (*continued*)—	
acks	45,601	Galvanised sheets and bars	32,472
le	21,477	Leather	11,959
shoes	27,131	Live stock	108,614
	4,189	Machinery	144,017
	43,799	Meats	49,922
	207,594	Paper, books, etc.	44,355
micals, etc.	61,285	Skins and hides	305,920
	77,382	Spirits	51,423
h and dried	40,090	Sugar	80,126
nd upholstery	12,936	Tallow	104,106
and bullion	3,029,445	Tea	83,405
	51,788	Tin	41,141
eel—		Tobacco, cigars, and cigarettes	
ured wrought	41,121		75,272
ack and galvanised	16,236	Wool	896,392

Amongst raw commodities the principal articles re-exported are tal
skins and hides, copra, tin, and wool; while the manufactured arti
are chiefly drapery, apparel, hardware, iron and steel, machinery, d
and chemicals, books and stationery, boots, beer and spirits, tob
cigars and cigarettes, and also large quantities of provisions. The
also a large re-export of gold. Grouped under the several heads alre
adopted for the imports and exports, the value of the re-export t
for the year 1897 was as follows:—

	£
Food and beverages, including breadstuffs	481,740
Wines, fermented and spirituous liquors	88,621
Live stock	108,614
Animal and vegetable products, including wool	1,606,746
Clothing and textile fabrics	338,430
Minerals and metals, raw or partly worked up, including silver bullion, lead, and ore	250,137
Specie and gold bullion	3,050,012
Articles of education, art, and amusement	165,353
Manufactured articles not elsewhere included	482,047
Articles unclassified by Customs	121,829
Total	£6,693,329

OVERLAND TRADE.

As the major portion of the goods exported overland simply pas
through the border colonies of Victoria and South Australia to Gr
Britain, the diversion of the trade along the railways of the colony
its ports must be looked upon as a distinct gain. It was believed t
the extension of the trunk railways to the centres of the pastoral indus
would have the effect of permanently diverting a not inconsidera
amount of trade from Victoria and South Australia, but it will be se
from figures in another part of this volume that such diversion has o
been partial. The condition of the Darling and other western riv
exercises a marked influence on the overland trade, especially in wo
and it is found that when the rivers are not easily navigable a lar
proportion of this staple reaches the eastern seaboard than is the c
in other seasons. A marked increase in the total trade will be noticed
1886 and the following years, and in 1891 the value of the trade
more than twofold that of the year first mentioned; but there
a large falling off in 1892, mainly owing to the strike at Bro
Hill, the decline in the total value of imports and exports at the W
lyama Custom House alone amounting to no less than £1,988,
This was in no small degree due to the diminished requirements of
population of the Broken Hill silver-fields, whose natural outlet i
way of Adelaide, which is connected by rail with Broken Hill.
slight revival in the overland trade in 1893 was due to the greater
ports and exports of gold in consequence of the financial crisis;
the decline in the exports in 1894 and 1895 was chiefly caused by
great fall in the price of silver in 1894, and by a fire in the workin

cipal mine in 1895, which adversely affected the industry in the district; and in the imports, to a number of causes, amongst ere a smaller import of live stock from Queensland and the still contraction of the goods introduced for consumption at Broken n 1896 and 1897 the imports overland were much higher than ear since 1891. This was due, first, to large imports of gold ctoria in both years; to a revival in the Barrier trade with ustralia; and to heavier imports of live stock from Queensland. the exports overland were £300,000 less than those of the two g years—accounted for by a decrease in the traffic in wool an outlet for shipment in the other colonies:—

Year.	Imports.	Exports.	Total.
	£	£	£
1870	1,071,087	2,177,813	3,248,900
1875	1,460,528	4,343,729	5,804,257
1880	1,438,155	4,768,542	6,206,697
1885	2,611,130	3,405,073	6,016,203
1886	2,039,168	4,251,800	6,290,968
1887	3,166,573	5,231,454	8,398,027
1888	3,040,010	5,559,681	8,599,691
1889	3,150,698	6,919,491	10,070,189
1890	4,707,341	8,026,376	12,733,717
1891	4,319,204	8,630,248	12,949,452
1892	2,928,417	6,034,211	8,962,628
1893	2,698,011	6,706,936	9,404,947
1894	1,788,654	5,222,089	7,010,743
1895	1,783,368	4,748,129	6,531,497
1896	3,125,671	4,769,738	7,895,409
1897	3,931,292	4,498,619	8,429,911

TRADE WITH THE UNITED KINGDOM.

trade of the United Kingdom with the colony holds a high , and although the value of the direct imports and exports is than the nominal amount of intercolonial trade, yet the com- ransacted with the mother country is much larger than the rade done with the neighbouring colonies; for the bulk of the exported overland to Victoria and South Australia is in reality l for England, and, likewise, a good proportion of the imports from o colonies for the supply of the wants of those inhabitants of uth Wales dwelling contiguous to the borders is the produce or cture of Great Britain. Thus, in 1897 the imports entered from ted Kingdom amounted to £7,557,069, and the exports thereto to 828, making a total of £16,285,897; but it is probable that the rade transacted with the mother country was over £23,000,000. following table, therefore, the values of the imports from and to the United Kingdom, from 1870 to 1897, must be accepted with this qualification, that they do not include the produce sent land for shipment at Melbourne and South Australian ports, n imports from the mother country finding their way into New S Wales through the southern colonies :—

Year.	Imports.	Exports.	Total British trade.
	£	£	£
1870	3,200,706	2,492,640	5,693,346
1875	6,062,226	6,374,503	12,436,729
1880	6,536,661	7,525,637	14,062,298
1885	11,885,597	7,293,133	19,178,730
1890	8,628,007	6,623,431	15,251,438
1891	10,580,230	8,855,465	19,435,695
1892	8,883,983	7,653,915	16,537,898
1893	7,218,124	8,269,507	15,487,631
1894	5,983,489	7,956,377	13,939,866
1895	6,420,107	9,371,418	15,791,525
1896	7,190,115	8,375,883	15,565,998
1897	7,557,069	8,728,828	16,285,897

INTERCOLONIAL TRADE.

The foregoing remarks will have made it plain that by far the la part of the intercolonial trade must be credited to the United Kingd as the natural outlet for the produce of the southern and wes districts is by way of Victoria and South Australia. Thus, ou £9,602,277 imported by New South Wales during 1897 from the A tralasian colonies, goods to the value of £4,246,000 only, excluding were the produce of the places from which they were received, and of the £8,174,666 exports only £2,876,000 were retained for local sumption by the colonies to which they were sent. The nominal v of the intercolonial trade since 1870 was as follows :—

Year.	Imports.	Exports.	Total trade.
	£	£	£
1870	3,677,927	3,837,680	7,515,607
1875	5,878,751	6,570,127	12,448,878
1880	5,945,788	7,381,172	13,326,960
1885	8,595,429	6,936,139	15,531,568
1890	10,981,721	11,284,740	22,266,461
1891	11,127,178	11,603,170	22,730,348
1892	9,201,193	8,917,677	18,118,870
1893	8,895,787	9,881,038	18,776,825
1894	7,794,168	8,243,954	16,038,122
1895	7,321,668	7,590,985	14,912,653
1896	9,559,860	8,374,826	17,934,686
1897	9,602,277	8,174,666	17,776,943

total trade of the Australasian colonies with New South increased largely from 1885 to 1891, due almost entirely to ade which sprang up with the working of the Barrier silver . The province of South Australia lies between the western t of New South Wales and the sea, and practically the whole of ade of the Broken Hill district passes through that province, and the volume of commerce credited to it. It will be seen from llowing table, which distinguishes the seaward from the overland a, that the nominal intercolonial trade, although greater during st two years than in 1894 and 1895, is still smaller than in any years 1887-93 :—

Year.	Seaward.	Overland.	Total.
	£	£	£
1885	9,515,365	6,016,203	15,531,568
1886	9,500,481	6,290,966	15,791,447
1887	9,612,332	8,398,027	18,010,359
1888	10,100,491	8,599,691	18,700,182
1889	11,318,168	10,070,189	21,388,357
1890	9,532,744	12,733,717	22,266,461
1891	9,780,896	12,949,452	22,730,348
1892	9,156,242	8,962,628	18,118,870
1893	9,371,878	9,404,947	18,776,825
1894	9,027,379	7,010,743	16,038,122
1895	8,381,156	6,531,497	14,912,653
1896	10,039,277	7,895,409	17,934,686
1897	9,347,032	8,429,911	17,776,943

already pointed out, a great proportion of the produce of New Wales which is sent overland is ultimately destined for European ts, and similarly with the imports from the other colonies, a large f this trade represents goods which have originally come from Britain but have been purchased in the Melbourne and Adelaide ts, or are passing through those ports as being the nearest routes eir destination. It is estimated that the value of goods the e of New South Wales consumed in the various colonies was 6,000 in 1897, and the value of the produce of the other colonies med in New South Wales, excluding coin and bullion, was 6,000. If from the value of New South Wales exports there be ted £693,393, the apparent value of domestic live stock exported adjacent colonies, it will be seen that the Australasian markets me a very small quantity of the goods of this colony.

VICTORIA.

Victoria comes first amongst the colonies of the group, as regard
trade with New South Wales, although Queensland displaced it du
the four years 1893-96. It is estimated that prior to the extensio
the railway system of New South Wales into the Riverine dist
nearly one-fourth of its territory, comprising some of its richest port
traded almost exclusively with Victoria. This traffic has now, to a
extent, been diverted along New South Wales lines to Sydney; and
trade of the colony with Victoria, instead of increasing with the se
ment of those districts, has been declining. The following table s
the trade of the year 1870, and of subsequent periods up to 1897 :—

Year.	Imports.	Exports.	Total.
	£	£	£
1870	1,153,695	2,583,552	3,737,247
1875	2,066,156	4,269,770	6,335,926
1880	2,187,119	4,578,867	6,765,986
1885	3,309,696	3,450,796	6,760,492
1890	2,097,259	5,386,553	7,483,812
1891	2,818,935	5,443,663	8,262,598
1892	2,432,399	4,278,907	6,711,306
1893	2,020,421	3,620,302	5,640,723
1894	1,583,206	3,129,663	4,712,869
1895	1,499,592	3,078,017	4,577,609
1896	2,115,721	3,296,451	5,412,172
1897	2,854,497	2,961,988	5,816,485

The import trade of the colony with Victoria covers a large rang
articles, and in this respect differs from the export, which mainly
prises three leading items of raw produce—wool, live stock, and
Dividing the imports from Victoria into two classes, viz., Victorian
other produce, the chief imports under the former class are agricult
implements, butter, breadstuffs, fruit, oats, hay and other fodder,
vegetables; while under the second head come drapery and apparel,
hardware, iron, machinery, stationery, tea, raw sugar, and va
manufactured articles. Victorian produce, properly so called,
chiefly to Sydney; the other articles are taken by the southern
western portions of the colony, which have for many years look
Victoria as a market whence such supplies are to be derived.

tion of Goods.	1893.	1894.	1895.	1896.	1897.
	£	£	£	£	£
....	8,050	7,032	6,931	10,706	12,635
s, stationery, etc.	5,972	4,681	4,664	9,357	8,975
....	11,115	9,234	7,299	12,973	11,974
ides	3,911	6,408	11,117	15,637	11,454
....	18,139	14,707	13,072	16,746	16,484
....	40,175	35,974	26,255	29,373	30,934
....	14,876	13,766	10,646	11,262	11,104
....	127,069	108,793	80,715	92,531	120,281
pars, etc.	10,558	9,390	9,644	10,708	10,047
ncy goods	3,541	2,752	3,751	5,361	6,170
(not including	11,940	10,315	7,639	11,693	14,180
....	2,975	1,891	2,182	2,711	3,027

orts to South Australia are chiefly silver bullion, lead, and ore, coal, and live stock. The values of the principal items for ve years are as follow :—

ion of Goods.	1893.	1894.	1895.	1896.	1897.
	£	£	£	£	£
hoes..............	3,176	2,391	2,041	13,962	12,997
....	62,858	63,418	51,947	106,445	125,199
....	59,000	445,000	19,000	64,100	20,000
....	3,813	10,033	6,701	1,088	14,396
....	112,335	90,094	71,064	54,568	101,418
....	16,352	6,279	10,113	14,274	15,091
s, & stationery	2,516	3,617	2,798	4,437	4,253
s, lead, and ore)	2,988,018	2,254,864	1,605,774	1,744,174	1,650,198
....	31,392	46,711	39,961	36,993	29,533
....	17,751	1,971	3,055	979	2,338
....	489,092	488,835	388,240	511,233	312,492

ords of the overland trade were not kept with exactitude year 1877, but the time which has since elapsed is amply o illustrate the importance of the trade. In the year mene imports and exports amounted to £464,252, while in 1891 ed the large sum of £6,341,926. This trade, however, was ined, the values in succeeding years fluctuating between 2¾ d 4½ millions, as will be seen from the next table. The exm 1886 to 1891 was due, as already pointed out, to the requirehe newly-found silver-fields near the South Australian border, ain reason for the decline in 1892 was to be found in the l silver production, and the consequently lessened amount of to the Barrier district. The revival in 1893 was owing to inoduction at Broken Hill consequent on the settlement of the disputes which had affected the silver industry in the previous

The chief export to Victoria is wool, forwarded to Melbourne shipment to London and other European ports. A large quantity this wool is shipped to Europe as the produce of Victoria, as bet prices are generally obtained for "Port Phillip" wool. The value wool exported to Victoria during 1870 and subsequent periods was follows:—

Year.	£	Year.	£
1870	1,057,457	1892	2,518,459
1875	2,253,184	1893	2,210,198
1880	3,224,289	1894	2,030,645
1885	1,868,019	1895	1,958,643
1890	2,521,898	1896	1,936,025
1891	2,779,963	1897	1,432,004

The decrease shown since 1880 is chiefly owing to the decline in market value of the staple, though it is also partly due to the extensio the railways, which has diverted much of the traffic from the old roa

Live stock of all kinds form a large portion of the exports Victoria, though the imports, especially of sheep, have also valuable. Victoria has already reached the point where the dem for meat exceeds the cast of stock, and is, therefore, dependent the other colonies, especially New South Wales, for the supply of deficiency, the amount of which is little short of one-fourth of whole consumption. The sheep exported are almost entirely South Wales produce; the cattle, however, are generally bred Queensland, and fattened for market in New South Wales.

Coal is next in importance as an export of this colony to Vict the value during 1897 being £241,971, which was far larger than value of the trade in this staple with any other country. The other exports usually worthy of note are skins, which are sent Melbourne for shipment; but in 1897 there was an export of wh the season being a good one in New South Wales and a bad on Victoria, which had a net import of breadstuffs during the year. following table shows the export trade during the last five years:—

Description of Goods.	1893.	1894.	1895.	1896.	18
	£	£	£	£	
Coal	314,000	252,200	256,137	250,622	24
Coin—gold	100,000	......	......	1,430	
Drapery	26,675	22,242	33,416	48,740	3
Fish (preserved)	908	1,742	3,232	4,275	
Fruit (fresh)	76,629	57,846	31,993	46,548	3
Kerosene shale	8,646	2,849	4,842	187	
Live stock	260,475	330,310	293,106	363,579	42
Machinery	13,474	16,335	13,092	31,745	3
Periodicals, books, paper, etc.	9,399	8,353	6,650	9,974	1
Skins	175,378	115,378	104,536	104,798	1
Tea	6,909	6,628	11,916	13,519	1
Timber	27,465	16,597	16,172	7,354	
Wheat and other grain	2,553	1,071	9,434	85,405	2
Wines	1,814	2,815	2,436	3,145	
Wool	2,210,198	2,030,643	1,958,643	1,936,025	1,4

bout two-thirds of the trade with Victoria is transacted borderwise.
ralue of the imports overland diminished greatly between 1885 and
, and although the last two years show a great increase in the
s, this has been chiefly due to heavy imports of specie. The over-
export trade to Victoria is now much less than formerly, as a
e at the following table will show :—

Year.	Imports.	Exports.	Total.
	£	£	£
1870	448,308	1,811,848	2,260,156
1875	945,049	3,546,674	4,491,723
1880	963,620	3,824,310	4,787,930
1885	1,555,139	2,450,444	4,005,583
1890	986,527	4,237,004	5,223,531
1891	1,088,012	4,184,219	5,272,231
1892	907,283	2,960,171	3,867,454
1893	912,956	2,486,282	3,399,238
1894	598,736	2,148,962	2,747,698
1895	570,440	2,104,591	2,675,031
1896	1,105,435	2,190,385	3,295,820
1897	1,923,763	2,094,907	4,018,670

QUEENSLAND.

mongst the colonies, Queensland takes second rank in the value of
de with New South Wales; indeed, during the four years 1893–96
placed Victoria from the first position. The estimated values of
mports and exports since 1870 are given hereunder. It is possible
they are somewhat understated, as there is a good deal of trade
tock which does not come under the cognisance of the Customs
rs :—

Year.	Imports.	Exports.	Total Trade.
	£	£	£
1870	1,767,974	680,301	2,448,275
1875	2,521,312	1,238,226	3,759,538
1880	2,224,421	1,362,262	3,586,683
1885	2,913,588	2,174,266	5,087,854
1890	5,482,452	1,670,465	7,152,917
1891	4,303,520	1,063,780	5,367,300
1892	4,122,822	1,105,173	5,227,995
1893	4,746,152	1,599,898	6,346,050
1894	4,506,490	970,926	5,477,416
1895	4,011,776	1,416,257	5,428,033
1896	4,679,456	1,227,754	5,907,210
1897	4,467,867	1,342,322	5,810,189

The imports from Queensland chiefly consist of gold, live stock, su wool, tallow, and hides. Large quantities of gold are sent from Quee land to be minted at Sydney, as there is no Branch Mint in the northe colony. The value of wool imported during 1897 was £807,53 entirely for re-export. Stock was imported to the value of £707,2 of which £428,384 represented cattle. The importation of cattle fr Queensland mainly depends on the suitability of the season for tra ling stock. As shown in the subjoined table, the figures for 1897 below those of the previous year, although much higher than in 18 and 1895:—

Description of Goods.	1893.	1894.	1895.	1896.	1897.
	£	£	£	£	£
Boots and shoes	1,069	3,509	1,335	7,370	3,
Drapery, apparel, etc. ..	7,966	10,898	12,467	17,630	12,
Fruit (fresh)	32,691	17,647	42,282	52,926	59,
Gold (bars and dust)......	2,155,843	2,392,785	1,693,663	1,758,811	1,955,
Live stock	752,813	396,253	333,646	798,823	707,
Maize	885	1,214	127	6,331	12,
Oysters	7,416	2,360	2,910	3,853	1,
Skins	164,719	146,533	240,581	276,642	265,
Sugar (raw)	377,307	460,378	341,034	334,237	267,
Tallow.........	144,126	249,516	294,504	158,396	92,
Wool	783,276	566,503	906,691	1,001,001	707,
Tin (ingots and ore)......	104,163	80,864	42,484	29,863	17,

Most of the goods imported from Queensland are for re-export, of the total imported during 1897 goods to the value of £2,822,400, more than 63 per cent., were not retained in the colony for ho consumption. New South Wales is the chief external market Queensland sugars and live stock, and there is a growing trade fruit and other sub-tropical products.

The exports have varied greatly in value from year to year causes similar to those affecting the imports; they comprise a number of items—mainly, however, the produce of foreign coun alues of the chief articles exported from New South Wales to sland during the last five years were as follow :—

Description of Goods.	1893.	1894.	1895.	1896.	1897.
	£	£	£	£	£
l (wearing)	17,063	16,151	18,912	12,003	9,637
nd sacks	12,218	17,382	16,232	15,323	18,140
and shoes..........................	8,223	6,278	15,534	15,526	6,307
....	9,640	6,438	9,580	9,745	11,022
gold)................................	841,700	305,000	580,200	85,000	5,000
y	52,780	32,732	72,690	71,084	63,167
....	11,579	10,214	4,367	177,581	282,717
fresh)	35,659	26,915	25,278	52,464	48,429
are	19,341	15,264	15,433	18,056	26,934
nd steel	87,630	68,199	96,065	113,117	160,971
r	7,681	7,037	12,352	7,868	8,510
tock	125,666	79,707	99,784	93,237	153,318
nery	40,222	30,425	38,740	36,861	50,176
books, stationery, etc..........	15,007	13,778	20,456	28,274	22,059
es	12,198	5,714	4,289	42,434	17,578
....	27,518	33,059	39,702	32,647	42,049
gots, ore, and plates)	4,497	12,960	14,545	9,027	6,506
o, etc................................	10,239	12,727	17,566	19,620	22,888
....	27,806	16,820	20,155	15,670	10,589

export trade with Queensland is not now so great as formerly, but trade for the most part consisted of British goods re-exported, it ly to be expected that the opening of a direct trade with Europe have this effect. The amount of border trade between the two s is shown in the following table. The fluctuation in the number, nsequently in the value, of stock imported and exported, accounts variation in the amounts :—

r.	Imports.	Exports.	Year.	Imports.	Exports.
	£	£		£	£
0	527,097	40,540	1892	879,716	243,971
5	249,247	223,667	1893	904,186	546,757
	231,161	245,651	1894	556,585	166,486
5	669,739	337,023	1895	592,126	507,244
	2,158,822	317,717	1896	1,020,830	216,961
	1,103,682	231,613	1897	999,410	160,641

South Australia.

rade with South Australia was at one time more variable than h any other colony, depending, as it then did, on the state of rray and Darling Rivers. After 1886, however, the element tainty was neutralised by the expansion of trade which was direct trade for 1897 being £190,244, as against £266,232 in while the trade *via* Hong Kong in 1897 was only £251,903 as a £498,140 ten years previously. The imports from Hong Kong 1897 consisted principally of opium valued at £15,155; tea, £ rice, £2,097; tobacco, £1,267; silks, £1,022; China oil, £ flax and hemp, £5,700; sugar (raw), £34,351; spirits, £ furniture and upholstery, £517; and preserves, £3,880. The trade for the year chiefly comprised the following items:—C the amount of £135,305; coal, £24,987; bêche-de-mer, £1,256; f £1,038; lead, £3,619; old metal, £3,356; and preserved meat, £

The Indian trade has grown up almost entirely since 1880, in year it amounted to only £20,264, increasing to £422,137 in Since that period the trade has greatly fluctuated, owing larg the variable export of coin. In 1890, it reached a total of £44 the highest value yet attained; but during the next three years it st declined, although in 1894 it showed an upward movement, the im ment being maintained in 1895, 1896, and 1897, when the values £266,744, £329,379, and £425,980 respectively. Castor oil is an which is largely imported from India, the value of the oil rec during 1897 being £14,755. There is also a large trade in wool the importations amounting to £52,804; and in bags and sac which goods to the amount of £75,048 were received. The only articles imported in any quantity during the year were mats and ma £3,709; rice, £7,383; tea, £75,977; coffee, £2,631; and tapioc semolina, £2,849. The outward trade with India in most ye confined almost entirely to coin, coal, and copper. In 189 export of gold amounted to £120,140, and the other principal ar exported were coal, £23,633, and horses, £18,460; the three mentioned comprising a value of £162,233, out of a total o trade of £169,857. The great fluctuation noticeable since 18 caused by the variable amount of gold coin and bullion exp In that year the value of gold exported was £203,299, and in only £87,361, while in 1894 there was no export of gold, in 18 export of only £19,456, in 1896 one of £67,127, and in 1897, o £120,140.

The Fiji Island trade is valuable, but, like the trade with other co possessions, is rather unsteady. In 1875 the imports from these Is were valued at £32,345, and the exports at £63,033, being a to £95,378; while in 1897 the imports were £53,836 in value, an exports had risen to £124,093, the total trade thus being £17 The imports were highest in 1885, when they were valued at £19 The exports reached their highest total in 1883, when they amoun £248,380; from that time there was a steady decline until 1887, the lowest figure was reached. A gradual recovery then took and the figures for 1893 were the highest recorded for a numb years, but during the last four years the trade has fluctuated, the for 1897, as before stated, being £124,093.

ise of a trade with the Canadian Dominion and Ceylon may be n the following table, which gives the imports and exports for d following periods:—

Period.	Canadian Dominion.		Ceylon.	
	Imports.	Exports.	Imports.	Exports.
	£	£	£	£
1875	....	....	....	2,059
1880	17,530	....	....	1,781
1885	62,847	....	17,701	8,531
1890	18,784	10	43,702	4,080
1891	32,864	40	55,544	631
1892	10,655	37	50,725	8,975
1893	33,316	8,374	70,991	2,052
1894	52,740	14,523	81,146	2,822
1895	61,742	16,804	94,595	2,055
1896	83,810	11,555	113,352	6,785
1897	187,291	19,340	132,940	6,123

or to 1893 there was a fair import trade in lumber with Canada, he establishment of a direct line of steamers between Sydney and uver in that year had the effect of increasing the number of s imported, and of laying the foundation of an export trade, h until that time was practically non-existent. So far, however, ll be seen from the preceding table, progress has been slow. It is that 1897 shows an increase of over £100,000 in the imports, but s represented wholly by flour, which cannot be said to be required e colony in view of the rapid extension of agriculture. The rts of wheat and flour in 1897 amounted to £134,836, out of a value of imports from Canada of £187,291; and if the value of anadian bicycles imported be taken into account—£23,467—there t a small sum left to represent other goods. These comprised r, £10,019; machinery, £3,523; paper, books, etc., £1,575; fish , dried, and preserved) £2,630; and drapery and apparel, £2,238. xport trade is still very small, representing in 1897 a value of £19,340, to which refined tin contributed £6,450; skins and hides, 3; preserved meat, £2,027; fruit, £1,457; and frozen mutton, 8.

late years there has been a marked tendency to substitute for e teas the product of Ceylon and India, and it is entirely due to ct that the import trade with the island has made the steady pro- hown in the above table. In 1897 the tea imported from Ceylon lued at £121,794, out of a total value of imports from the island 2,940; the other principal imports being coffee, £2,806; fibre, ; and oilmen's stores, £3,866. The chief exports were coal, ; horses, £1,110; frozen meat, £2,176; butter, £182; and pre- meat, £148.

TRADE WITH THE UNITED KINGDOM AND ITS POSSESSIONS

To what extent the trade of the colony follows the British fla be gathered from the following figures, which show not only the of the trade of New South Wales with Great Britain and her dencies during the period since 1870, but also the proportion that trade bears to the whole. A fairly steady proportionate is apparent in the exports since direct trade with Continental was established :—

Year.	Imports from Great Britain and British Possessions.	Percentage of total imports.	Exports to Great Britain and British Possessions.	Perc of ex
	£		£	
1870	6,924,998	83·59	7,687,148	9
1875	12,563,296	93·13	13,213,258	9
1880	13,021,783	91·85	15,210,314	9
1885	21,299,715	89·74	14,794,052	8
1886	19,153,071	89·86	14,250,570	9
1887	17,564,948	91·62	16,485,109	8
1888	19,034,772	89·66	18,508,498	8
1889	20,198,508	88·34	20,281,259	8
1890	20,273,053	89·64	18,582,372	9
1891	22,474,355	88·54	21,066,606	8
1892	18,662,883	89·83	17,053,145	7
1893	16,679,402	92·11	18,569,809	8
1894	14,386,013	91·04	16,506,202	8
1895	14,352,796	89·75	17,323,106	7
1896	17,375,139	84·50	17,271,037	7
1897	18,015,922	82·85	17,503,943	7

FOREIGN TRADE.

The total value of the trade of the colony with countries othe those under British dominion is appreciably increasing. The i trade is marked by fluctuation; but the export trade has been regular, and shows a considerable increase during the past ten yea to the establishment of direct trade with France, Belgium, and Ge There was a large decline in the imports in 1887; but th ground was more than recovered in subsequent years; and th decline in 1893 and 1894, in the exports as well as the impo uses which affected the whole trade of the colony, though not the same degree as the commerce with foreign countries. In e trade again showed an upward tendency, and the advance has ll maintained, both the imports and exports in 1897 being the on record :—

Imports.	Exports.	Year.	Imports.	Exports.
£	£		£	£
2,194,505	2,411,632	1893	1,427,633	4,351,414
2,664,549	3,013,675	1894	1,415,928	3,981,471
2,341,951	3,463,565	1895	1,639,619	4,611,679
2,909,042	4,877,414	1896	3,186,371	5,739,312
2,113,643	4,919,102	1897	3,728,428	6,245,129

THE UNITED STATES.

e time the United States was the largest foreign market of the the value of the exports thereto far exceeding those sent to her foreign country ; but the direct shipments of wool to the nt of Europe, which are steadily increasing, have placed it below and Germany, although the large shipments of gold may seem to e otherwise. The import trade, however, is still greater than that ted direct with the principal Continental countries, although the from Germany are rapidly growing, and it is to be remembered me foreign products are sent to the colony by way of Great . Further, a large proportion of the imports from America is nted by breadstuffs, the consumption of which has now been en by local cultivation. The fluctuation of the trade, as shown ollowing table, is due to the variable exports of gold coin and of wheat and flour :—

Imports.	Exports.	Year.	Imports.	Exports.
£	£		£	£
967,528	1,044,144	1893	526,331	626,566
1,094,697	1,130,589	1894	542,427	374,541
859,102	1,300,375	1895	624,268	683,606
1,277,032	2,313,671	1896	1,729,871	2,064,964
823,522	1,529,980	1897	1,887,877	2,462,319

The imports comprise a large number of articles, amongst w following are the most important :—

Description of Goods.	1893.	1894.	1895.	1896.
	£	£	£	£
Bicycles, &c.	971	554	644	50,758
Brushware	3,832	2,943	4,550	4,991
Carriages and carriage materials	12,751	17,165	17,278	24,131
Drugs and apothecaries' ware	9,551	9,844	13,002	20,445
Fish (preserved)	19,028	14,754	19,028	35,527
Flour	240	......	......	264,199
Furniture and upholstery	6,117	5,307	4,495	6,842
Hardware	51,574	21,967	20,208	33,173
Iron and steel	8,250	6,631	10,536	11,690
Kerosene	52,411	54,867	71,967	70,402
Leather	19,393	27,662	22,070	24,308
Machinery	11,421	14,591	19,930	71,603
Meat (preserved)	1,991	1,065	831	4,371
Paper, books, stationery, etc.	51,189	28,626	34,696	56,103
Railway plant	1,845	2,494	2,996	2,100
Sewing machines	6,476	21,120	13,578	19,778
Silver plate and plated ware	2,231	2,990	2,529	2,767
Timber—dressed and undressed	58,738	55,203	82,979	117,772
Tobacco, cigars, etc.	28,032	32,848	47,508	110,774
Turpentine	5,032	5,023	10,460	8,207
Watches and clocks	6,140	6,216	8,246	10,288
Wheat	......	.....	......	445,690

The exports to the United States are chiefly confined to specie few articles of raw material, the produce of the colony, the pr of which are marsupial skins, wool, and coal. No other goo exported in considerable quantities. During the last five yea values of the exports of the principal articles were as follow :—

Description of Goods.	1893.	1894.	1895.	1896.
	£	£	£	£
Gold (specie)	285,600	100,218	100,000	1,677,742
Coal	111,240	112,271	106,940	119,920
Tin	70,584	28,484	44,768	22,182
Skins (chiefly marsupial)	89,736	43,749	200,998	80,351
Wool	17,572	79,336	218,679	150,396
Shale	1,752	418	904	1,280

port of gold to the United States of America has already been to, and a statement of the coin and bullion sent away during he past ten years may be found interesting:—

Year.	Value.	Year.	Value.
	£		£
1888	578,488	1893	302,073
1889	751,220	1894	100,218
1890	1,016,940	1895	100,000
1891	1,710,670	1896	1,677,742
1892	986,000	1897	2,075,476

BELGIUM.

direct trade between this colony and Belgium began in 1881, and o a large extent, be attributed to the International Exhibition Sydney during 1879–80. In the year mentioned the combined and exports amounted to only £26,237, while in 1893 they had to £1,250,720, although in 1897 they were only valued at 97. This cannot but be regarded as a great increase in so time. In point of value the Belgian trade of the colony is than that of any other foreign country, Germany, France, and ited States excepted; but the port of Antwerp, which receives k of the trade, is a distributing centre for a great part of the tined for French, German, and other Continental markets, and possible to say how much of the goods shipped to Belgium are requirements.

imports from Belgium comprise a large number of articles. its various manufactures, principally in bars, plate, and wire, very large proportion of the total imports, and glassware cigars, cement, and starch are all imported to some extent he trade in each commodity is subject to considerable fluctuation. ward trade is confined almost entirely to wool, though some d skins and hides are also exported. In 1897 the amount of nd washed wool sent to Belgian ports was 2,040,726 lb., valued 20, and 17,129,907 lb. of greasy wool, of the value of £493,505, a total of £587,925. Belgium was, therefore, next to Great France, and Germany, the largest purchaser of New South ol during the year. The following table shows the import rt trade with Belgium for the last ten years:—

Imports.	Exports.	Year.	Imports.	Exports.
£	£		£	£
64,766	723,286	1893	129,114	1,121,606
88,843	725,687	1894	115,119	1,121,822
130,819	1,011,864	1895	150,288	780,826
188,277	1,039,333	1896	104,293	877,880
227,363	951,570	1897	77,552	668,545

GERMANY.

A large trade has been maintained with Germany since 1879. communication was established in 1887 by the North German Company, of Bremen, and further extended by a line of Germa boats which commenced trading between Hamburg and Syd 1888. The trade has attained considerable dimensions, and now that with any other foreign country, although the Customs retur not always disclose this fact. The larger trade with the United is, as has been shown, mainly due to shipments of gold. The fol table shows the values of the principal articles imported from Ge during the last five years. So great is the extension of the trade is only possible to give a selection of the goods now sent to the but a glance at the detailed imports will show that in nearly branch of manufacture German productions are obtaining a foo the Australian markets :—

Description of Goods.	1893.	1894.	1895.	1896.
	£	£	£	£
Apparel, drapery, boots, etc.. ...	77,703	46,545	72,747	110,087
Arms, ammunition, and explosives ..	3,771	4,487	2,816	10,025
Beer	6,254	6,411	9,090	17,902
Books, paper, stationery, etc....	7,254	12,610	11,036	20,387
Boots and shoes	22,086	25,823	19,409	21,612
Candles	4,982	4,949	6,998	22,331
Cement	5,159	1,463	25,498	31,131
Drugs and apothecaries' wares	6,013	5,956	7,660	9,404
Furniture	15,498	3,279	5,308	11,036
Glass and glassware	9,009	9,953	12,200	26.001
Hardware and ironmongery....	13,432	5,276	5.347	9,863
Hollow-ware	......	7,233	10.968	12,848
Iron and iron manufactures....	40.051	47,467	49,972	95,975
Lampware	2,631	774	2,675	6.465
Machinery	6,486	3,493	2,760	14,964
Matches	2,727	2,457	1,971	6,130
Musical instruments	28,930	23,820	34,989	55,056
Sewing machines	3.664	2,700	5,481	3.052
Spirits	35,997	15,799	34.576	39.102
Starch	5.770	6.463	5.330	8,407
Sugar	1,927	306	2,271	3,913
Telegraphic material....	1,237	4,500	4,163	3,180
Tobacco, cigars, and cigarettes..	27,041	16,971	12,556	19,744
Toys and fancy goods	21,896	18.424	21,364	19,035
Zinc	846	642	1,961	9,495

The exports consist almost entirely of wool, the value of w 1897, was £813,136, out of a total export of £880,440. The goods exported to a considerable value during the year were hides, £19,462. The increase in the wool export has been ch

reater facilities now existing for direct shipment. The values
ports and exports for the last ten years were as follow :—

Imports.	Exports.	Year.	Imports.	Exports.
£	£		£	£
481,009	128,546	1893	373,233	979,898
533,082	519,435	1894	345,364	917,310
639,475	404,280	1895	425,697	1,141,661
773,016	437,522	1896	690,843	771,389
581,402	1,017,456	1897	900,464	880,440

FRANCE AND NEW CALEDONIA.

French trade has risen in importance since 1881, a result almost
due to the establishment of direct communication between this
and the Republic by the Messageries Maritimes Company, but
been accompanied by a corresponding falling off in the trade with
aledonia, the chief dependency of France in the South Pacific.
while in 1888 the total value of French imports and exports
ted to only £275,579, as against £1,754,797 in 1897, that of
ledonia fell during the corresponding period from £222,594 to
11.

ing apparel and drapery form in most years the largest class of
from France. In 1897 the imports of drapery and silk amounted
,132; of apparel, to £18,782; and of boots, to £1,885. During that
wever, these goods were surpassed by wines and spirits—the
of the former amounting to £21,059, and of the latter to £31,801.
d fancy goods to the value of £7,950; cigars, £15,386; cream of
£29,356; glassware, £1,965; leather, £2,332; and roofing tiles,
were the only other goods largely imported. Great quantities
ch goods are imported from Great Britain; but this indirect
ill ultimately be superseded by direct trade, and the cost of
ion and double handling thus saved to the colony.

forms the chief export to France. The value exported during
s £1,364,121—an increase of £79,028 over the export of the
g year. Sheepskins to the value of £133,825, and other skins of
f £33,690, were also exported. The trade with France since
hown in the following table :—

Imports.	Exports.	Year.	Imports.	Exports.
£	£		£	£
154,856	120,723	1893	49,436	1,134,072
179,900	104,104	1894	70,649	1,067,440
117,871	233,924	1895	76,663	1,436,122
120,321	480,599	1896	145,972	1,472,909
77,436	806,693	1897	211,317	1,543,480

As already pointed out, New Caledonia is an important market the produce of the colony, though its value has been affected by establishment of regular communication between France and her de dency. The state of trade during the last ten years will be evi from the following figures:—

Year.	Imports.	Exports.	Year.	Imports.	Expo
	£	£		£	£
1888	68,637	153,957	1893	21,417	89,7
1889	85,582	189,660	1894	25,171	72,7
1890	83,920	193,389	1895	28,345	71,3
1891	48,378	185,768	1896	41,263	110,3
1892	18,242	184,128	1897	30,404	143,7

CHINA.

With the exception of Chile, with which an export trade to the of £136,451, chiefly in coal, was transacted in 1897, the only other fo countries whose trade with New South Wales reaches a large f are China and Japan. The imports and exports credited to Hong K however, belong in reality to the Chinese Empire generally, and diminution which has taken place in the China trade since 1881 is attributed in no small degree to the transference of part of the from the ports of the Empire to Hong Kong. Still, when allowan made on this score, it will be found that the actual loss of trade no means inconsiderable. The main import from China is tea, exhibits a falling off, the decline being attributable to the larger cons tion of Indian and Ceylon teas, the imports of which have la increased during late years. The direct export trade has never great. To correctly gauge the commercial relations between this c and China, the trade of Hong Kong should be considered in conjun with the figures given below:—

Year.	Imports.	Exports.	Year.	Imports.	Expo
	£	£		£	£
1888	309,934	7,651	1893	164,481	5,6
1889	257,353	11,587	1894	131,006	7,4
1890	241,840	1,037	1895	133,870	7,3
1891	270,929	12,164	1896	190,545	7,4
1892	217,996	9,810	1897	187,646	[illegible]

JAPAN.

rar with China gave Japan a new importance in the eyes of the ınd that enterprising country may in the future be expected to large market for many of the products of New South Wales. years ago a commercial treaty with Japan was concluded by Britain, and it was open to the Australasian colonies to take age of its provisions; but the opportunity was allowed to pass w South Wales, as it was considered that participation in its s would have left the colony open to the unrestricted immigration Japanese. However, it is clear that, outside this treaty, the rcial relations of Australia with Japan will be greatly extended. eamers of one of the largest of the Japanese shipping companies, ippon Yusen Kaisha, are now running between Sydney and ama, and the most recent addition to the service, the Kasuga is a high type of vessel. These vessels are subsidised by the se Government, and are bound to monopolise the trade between o countries. The growth of the direct trade of New South with Japan during the past five years will be seen from the ing table:—

Year.	Imports.	Exports.
	£	£
1893	8,913	7,137
1894	27,468	15,302
1895	28,179	54,242
1896	40,857	35,523
1897	69,615	58,452

growth of the export trade is especially gratifying, and justifies ticipations indulged in that a market for Australian wool would be in Japan, the export of this article from New South Wales having ed from £3,170 in 1893 to £44,545 in 1897. The other chief items ort in 1897 were manures, £2,926; tallow, £2,026; coal, £1,912; £1,789; gluepieces, £394; and leather, £190. The Broken Hill etary Company is also now finding in Japan a good market for The imports during last year were principally rice, £23,465; £14,859; toys and fancy goods, £13,192; oils, £2,776; mats and g, £2,304; drapery, £1,416; furniture, £1,225; matches, £1,220; ınd chemicals, £1,119; and brushware, £1,072.

BALANCE OF TRADE.

flow of British money into the colony for investment, and the ls of loans floated by the Government for the purpose of carrying lic works, so far exceeded the interest payable on the public debt e earnings on private investments that the imports were formerly greatly in excess of the exports. Since 1890 the importati capital have to a large extent ceased, and the exports have ex the imports. The interest to be provided annually by New South on public loans, State and municipal, is over £2,000,000, an estimated that, in addition to this, there is a further sum of £2,500,000 sent away as earnings on private investments and inc absentees, making a total annual charge of over four-and-a-half m at the present time. The following is a statement of the bala trade for each of the last ten years:—

Year.	Excess of Imports.	Excess of Exports.
	£	£
1888	309,147	....
1889	....	431,877
1890	569,067	....
1891	....	560,623
1892	....	1,195,721
1893	....	4,814,188
1894	....	4,775,732
1895	....	5,942,370
1896	....	2,448,839
1897	....	2,006,722

TARIFF CHANGES.

The Custom House, properly so called, was first established i colony in the year 1800, when spirits, wine, and beer were sub to specific import duties for the purpose of raising a fund to comp gaol then in course of construction in the city of Sydney. Be 1800 and 1830 the tariff was varied many times; there were the duties on spirits and tobacco, and *ad valorem* duties on other a of consumption. A feature of the *ad valorem* duties was that th entirely on non-British products, as goods, wares, and merchandi growth, produce, or manufacture of the United Kingdom, and n subject of specific duties, were admitted free. In April, 18 revision of the tariff was made, and it was enacted that on spiri produce of the United Kingdom or of His Majesty's plantations i West Indies, and imported direct from the United Kingdom, should be paid a duty of 6s. 6d. per gallon; on spirits made or di from grain, the produce of the colony or its dependencies, 2s. 6 gallon, and if made from sugar or molasses, 8s. 6d. per gallon; a spirits not the produce of the United Kingdom, imported, 8s. 6 gallon. On unmanufactured tobacco there was levied a duty of 1 per lb., and on manufactured tobacco or snuff, 2s. per lb. These the only fixed duties; on all other goods, not being the growth, pr or manufacture of the United Kingdom, there was payable a *valorem* duty of 5 per cent.

ae duties remained at these rates until the 1st April, 1840, when llation from any article except grain was prohibited. From the October of the same year the duty on spirits, the produce of the ited Kingdom, or of British possessions in the West Indies or rth America, and imported direct from the United Kingdom, was d at 9s. per gallon; on all other spirits the duty was to be 12s. per lon. The duty on wine was fixed at 15 per cent. *ad valorem*; and tea, sugar, flour, meal, wheat, rice, and other grain or pulse, 5 per nt. *ad valorem*. Unmanufactured tobacco was subject to a duty of 6d. per lb., and manufactured 2s. per lb.; all other goods, not the duce or manufacture of the United Kingdom, were subject to a duty 10 per cent. *ad valorem*. From the same date the duty on locally tilled spirits was fixed at 6s. 6d. per gallon; but on the 1st January, 42, it was raised to 9s. per gallon, which was the duty payable on irits made in and imported from the United Kingdom. The restriction local distilleries in regard to the use of anything but grain for dis- lation was at the same time removed, and by an order of the Queen Council the produce of British India was admitted on the same terms that of the United Kingdom. The tariff in regard to spirits was ain altered on the 1st January, 1848; the duty on colonial spirits, m, and whisky was reduced to 3s. 6d. per gallon, and on all other irits to 6s. per gallon.

On the 5th August, 1852, what is known as the E. Deas-Thomson riff came into effect. The duties were made uniform for all countries ading with the colony, the differential treatment of British goods ing done away with. The tariff was as follows:—

Articles.	Rate of Duty.	
Ale and beer in wood	℔ gallon,	1d.
,, in bottle	,,	2d.
Coffee, chocolate, and cocoa	℔ lb.,	¾d.
Dried fruits	,,	½d.
Brandy and gin	℔ proof gal.,	6s.
Whisky, rum, and all other spirits	,,	4s.
Perfumed spirit	℔ gallon,	4s.
Cordials	,,	6s.
Refined sugar	℔ cwt.,	3s. 4d.
Unrefined sugar	,,	2s. 6d.
Molasses	,,	1s. 8d.
Tea	℔ lb.,	3d.
Manufactured tobacco, until 31 December, 1853	℔ lb.,	1s. 6d.
,, after 31 December, 1853	,,	1s.
Unmanufactured tobacco, to 31 December, 1853	,,	1s.
,, after 31 December, 1853	,,	8d.
Cigars and snuff	,,	2s.
Wine, in wood or bottle	℔ gallon,	1s.
Colonial distilled spirit	℔ proof gal.,	3/8

The duties remained untouched for two years, when the charges spirits were increased as follows, as from November 10, 1854:—

Articles.	Rate of Duty.	
Brandy and gin	℘ proof gal.,	9s.
Whisky, rum, and other spirits	,,	6s.
Perfumed spirit	℘ gallon,	6s.
Cordials	,,	9s.
Colonial distilled spirit	℘ proof gal.,	5/8

From the 14th September, 1855, the following revised scale of d was imposed:—

Articles.	Rate of Duty.	
Brandy and gin	℘ proof gal.,	10s.
Whisky, rum, and all other spirits	,,	7s.
Perfumed spirits	℘ gallon,	7s.
Cordials	,,	10s.
Wine	,,	2s.
Ale and beer, in wood	,,	1d.
,, in bottle	,,	2d.
Tea	℘ lb.,	3d.
Sugar, refined and candy	℘ cwt.,	6s. 8d.
,, unrefined	,,	5s.
Treacle and molasses	,,	3s. 4d.
Coffee and chicory	℘ lb.,	2d.
Cigars	,,	3s.
Tobacco and snuff	,,	2s.
Colonial spirits distilled from sugar	℘ proof gal.,	6/5

This tariff remained in force for ten years; the only changes were that opium was added to the list of dutiable goods at 10s. per and unmanufactured tobacco was charged from 1st January, 1862, duty at the rate of 1s. per lb. instead of 2s. On the same date an exp duty was levied on gold at the rate of 2s. 6d. per oz., but on the October this export duty was reduced to 1s. 6d. per oz., and contin in force for seventeen years, the duty being abolished 10th J 1879. A poll-tax of £10 was levied on Chinese from 22nd Novemb 1861.

The next alteration in the tariff was the imposition of a duty of per package on all goods imported into the colony, excepting live st flour, wheat, sugar, tea, and goods in transit. These duties were addition to existing duties, and were chargeable until the close of year 1867. They were followed by an all-round increase of 20 per c in the duties payable in respect of all goods imported for home consum tion, with the exception of tea, sugar, brandy, and gin. Th additional duties remained in force until the 29th November, 1 n a new tariff was imposed. The Act sanctioning the tariff was nted to on the 19th January, 1866; that is, about seven weeks after duties were collected. The tariff as amended was as follows:—

Articles.		Rate of Duty.	
Tea		℔ lb.,	3d.
Sugar	refined	℔ cwt.,	6s. 8d.
	unrefined	,,	5s.
	molasses	,,	3s. 4d.
Coffee and chicory		℔ lb.,	2d.
Tobacco	manufactured, and snuff	,,	2s.
	unmanufactured	,,	1s.
	cigars	,,	3s.
Spirits and spirituous compounds		℔ gallon,	10s.
Wines		,,	3s.
Ale and porter	in bottle	,,	6d.
	in wood	,,	3d.
Malt		℔ bushel,	6d.
Hops		,,	2d.
Opium		℔ lb.,	20s.
Rice		℔ ton,	40s.
Dried fruits		℔ cwt.,	10s.

On all other goods except those on the free list an *ad valorem* duty of per cent. was chargeable. The free list comprised flour, wheat, nimals, fresh fruits, wool, tallow, and some other articles, chiefly of export. The package duty was continued, as well as the duty of 10 levied on Chinese males arriving in the colony, and the excise duty colonial distilled spirits was raised to 9s. 5d. per gallon. The poll-x on Chinese was repealed on 20th November, 1867, and for the next rteen years the immigration of these aliens was unrestricted.

A further important change in the tariff was made, dating from the d May, 1871. The number of articles subject to specific duties was y largely increased, and the 5 per cent. *ad valorem* duties were inued; but there was a much larger free list, introduced, it was ted, for the purpose of lightening as much as possible the South Sea nd trade. The *ad valorem* duties were abolished on the 1st January, 74, and the number of articles liable to specific duty was reduced. e next twelve and a half years saw little alteration in the body of tariff, the changes made being chiefly in the direction of increasing duties on wines, spirits, and tobacco. From the 10th December, 9, the spirit duties stood as follow:—

Articles.	Rate of Duty.	
Spirits and spirituous compounds	℔ proof gall.,	12s.
Colonial distilled spirits	,,	12s.
Sparkling wine	℔ gallon,	10s.
Other wine	,,	5s.

Colonial distilled spirits are subject to an excise equal to th on imported spirits. In 1886 the quantity entered for consumpti 9,733 gallons, on which a sum of £5,846 was paid; but in 188 withstanding the increased duty levied, the quantity subject to increased to 15,762 gallons, and the amount of duty to £10,75 1892 the duty collected amounted to £21,132 on 30,187 gal spirit distilled, in 1893 to £18,165 on 25,950 gallons, in 1 £14,694 on 20,991 gallons, in 1895 to £8,606 on 12,294 gall 1896 to £5,609 on 8,013 gallons, and in 1897 to £5,025 on gallons, the diminished quantities of the last three years bei to the closing of the only distillery in the colony in the middle year 1895.

Still wine is subject to an import duty of 5s. per gallon, and sp wine to 10s. per gallon. The import of the first-named is no than it was ten years ago, and the Customs revenue derived fro article has considerably declined. The amount of still wine im during 1897 was 64,364 gallons, on which £16,091 duty was paid. quantity of sparkling wine on which duty amounting to £6,69 collected was 13,390 gallons. The growing favour in which Aus wine is held, and the general depression, which has limited the a of money available for luxuries of this kind, have had the ef reducing the importations of foreign wine.

The import of ale and beer was larger during 1891 than i previous year, the quantities of beer imported, on which dut paid, being 1,017,617 gallons in wood and 1,481,681 gallons in bo a total of 2,499,298 gallons; in 1897 the figures had fallen to 8 gallons and 925,547 gallons respectively, paying duty to the amo £56,760, at the rate of 6d. per gallon for beer in wood or jar and bottled. The excise duty on beer brewed in the colony is at the 3d. per gallon. It was first collected for the second half-year of and amounted to £63,565, the quantity on which duty was pai 5,085,217 gallons: in 1892, excise duty amounting to £135,0 collected on 10,807,200 gallons; in 1893, £120,915 on 9,7 gallons; in 1894, £118,855 on 9,508,400 gallons; in 1895, £1 on 9,821,840 gallons; in 1896, £127,217 on 10,177,360 gallon in 1897, £135,080 on 10,806,400 gallons. As a set-off agai duty thus imposed, no duties are levied on hops and malt.

The duties levied on tobacco imported into the colony are, manufactured article, 3s. per lb.; on tobacco for manufacturing p if delivered from bond to any licensed tobacco manufactory, 1s. on the leaf if delivered from bond for home consumption, and not licensed factory, 3s.; and on cigars and cigarettes, 6s. The ex tobacco made in the colony is 1s. 3d. per lb., and on cigars and cig 2s. 6d. The total amount of import duties collected on toba cigars during 1897 was £265,425, which was larger by £13,754 t amount collected in 1896.

884 excise duties were first levied on tobacco manufactured in ony. The amount collected annually during the last ten years -

r.	Tobacco.	Cigars and Cigarettes.	Year.	Tobacco.	Cigars and Cigarettes.
	£	£		£	£
8	128,899	1,038	1893	111,035	13,188
9	123,212	1,150	1894	108,281	15,011
0	118,287	2,806	1895	117,734	17,183
1	123,937	7,425	1896	116,101	21,840
2	122,789	10,265	1897	117,046	24,324

r the duty was increased in 1886 the revenue derived from the im- leaf was found to decline, the place of the imported article being l by leaf grown in the colony. To meet this falling off, the excise vied on colonial-made tobacco entered for home consumption was ed, in March, 1887, from 1s. to 1s. 3d. per lb. If the American leaf, subject to a duty of 1s. per lb., were used exclusively in the manu- of tobacco in the local factories, the actual duty paid on the finished would have been, previous to the alteration in the tariff, 2s. per 2s. 3d. since the alteration, as against 3s. for the imported article. ported leaf is by no means exclusively employed—large quantities ly-grown leaf are used, and the absolute amount of duty paid per the tobacco made in the colony, other than cigars and cigar- as 1s. 6½d. in 1888, 1s. $6\frac{13}{50}$d. in 1889, 1s. $6\frac{7}{12}$d. in 1890, d. in 1891, 1s. 6¾d. in 1892, 1s. 7d. in 1893, 1s. 6¾d. in 1894, in 1895, 1s. 7⅖d. in 1896, and 1s. 8⅗d. in 1897. This subject fully dealt with in the subsequent chapter on "Agricultural tion."

luty on tea, which was 3d. per lb., was abolished in March, 1892; a period of 6½ years the import of this article was free, a duty er lb. being imposed from the 3rd November, 1898. While the was in force the amount of revenue varied very little from year being a little over £100,000. The revenue received from rce for the ten years from 1883 to 1892 is shown below. The in 1891 was due to withdrawals from bond in anticipation of ase of duty, which, however, was not imposed:—

Year.	Amount.	Year.	Amount.
	£		£
1883	75,713	1888	100,617
1884	100,059	1889	108,954
1885	98,915	1890	106,986
1886	105,979	1891	120,326
1887	106,815	1892*	4,009

* To 1st March.

During the first half of 1897, refined sugar coming into the c was subject to a duty of 6s. 8d. per cwt., and during the second h the year to 5s. 4d. per cwt. This rate, however, has now been red to 4s. per cwt., which has been fixed as a permanent duty. The C missioners of Customs only include loaf sugar under the headin refined, and the quantity imported during 1897 was but 3,605 c paying duty to the amount of £1,058. Duty was levied during 189 raw sugar, which includes all the ordinary sugars of trade, at the of 5s. per cwt. during the first six months, and 4s. per cwt. during second half of the year, the total revenue from raw sugar amountin £119,641. The duty has been further reduced to 3s. per cwt which it will remain. The revenue from raw sugar is shown in following table:—

Year.	Quantity.	Amount.	Year.	Quantity.	Amou
	cwt.	£		cwt.	£
1888	470,668	117,667	1893	414,048	103,
1889	642,880	160,720	1894	629,656	157,4
1890	558,540	139,625	1895	516,156	129,
1891	519,725	129,931	1896	712,000	178,
1892	521,444	130,362	1897	557,503	119,

The other articles which produced most revenue in 1897 were f green and preserved, which yielded £60,051; opium, £17,248; bi sarsaparilla, essences, and tinctures, £14,418; oils, kerosene and o £13,629; candles, £7,768; molasses, £7,579; confectionery, £6, jams and jellies, £4,673; glucose, £2,506; and other articles, £3, these amounts, together with those already given for spirits, wines, tobacco, and sugar, making up the amount of duties collected, £1,250,176. From this amount, however, drawbacks and refunds allowed to the amount of £11,092, so that the net revenue £1,239,081. During the same period the excise duties amount £282,598, and drawbacks and refunds to £1,566, leaving the net £281,032. The net import and excise duties together were £1,520

The following table shows the net Customs revenue, exclusi harbour dues, etc., in each colony for the year 1897:—

Colony.	Import Duties.	Excise.	Total.
	£	£	£
New South Wales ...	1,239,084	281,032	1,520,116
Victoria	1,729,130	296,863	2,025,993
Queensland	1,160,404	84,152	1,244,556
South Australia	576,030	36,174	612,204
Western Australia...	1,062,026	....	1,062,026
Tasmania	350,947	19,366	370,313
New Zealand	1,912,161	75,297	1,987,458

ment of the amount per head is apt to lead to false conclusions, to be borne in mind that a low consumption of taxable goods igh tariff may give a revenue per head not greater than a high ion under a low tariff.

oss Customs' revenue collected at Sydney, outports, and inland luring the year 1897 is shown below :—

ation.	Amount.	Station.	Amount.
	£		£
	1,362,057	Mulwala	3,852
		Mungindi	105
	20,045	Newcastle	104,590
	146	Richmond River	16
	13,566	Swan Hill Crossing	1,501
	1,697	Tocumwal	3,803
	1,138	Tweed River	29
	5,359	Wallangarra	842
	7,438	Wentworth	5,705
	67	Wilcannia	9,958
	571	Willyama	38,789
	96	Wollongong	412
	620	Paid direct to Treasury	1,068
	7,217		
	9,003	Total ... £	1,599,690

ive of the receipts from the public wharves, and of the pay- ceived from the Marine Board, the revenue of the Customs ent in 1897 was £1,528,433; and the expenditure, including of the stores and stationery used during the year, £51,960, or or every £100 collected. This average cost, which is 6s. 11d. that in 1896, does not include the interest on £187,400, the alue of the land and buildings occupied in the transaction of the business.

FORESTRY AND FISHERIES.

FORESTRY.

FEW countries have such a wealth of timber as New South W possesses. Its woods are as varied as they are valuable, ra from the ironbarks, unsurpassed for work requiring hardness and d bility, to the kinds suitable for the most delicate specimens of cabinet-maker's art. It must be confessed, however, that some vari of timber trees, at one time very plentiful, and which, had they rece attention at the hands of the State, would be plentiful still, are hard to find in any district to which there is easy access. But thi the common experience of new countries, where the pioneers, whet settlers or timber-getters, cut down indiscriminately, giving no tho to anything but their immediate requirements.

The necessity of preserving the timber resources of the colony, preventing the ruthless destruction of the best species of brush hardwood which was being carried on, principally in the Clar River district and in the eucalyptus forests on the Murray, led Government, in 1871, to establish throughout the country a cer number of Forest Reserves in which permission to cut timber shoul granted upon payment of a fixed fee. It soon became apparent stringent regulations alone could put a stop to the reckless operati of the licensed timber-getters; but it was not until September, 18 that such regulations were issued. These appeared not a day too as the best species of cedar, which abounded in the Clarence R districts, had been exploited to such a wasteful extent that the su of this magnificent timber threatened to give out. Cutting down in criminately trees of all sizes, and clearing the lower lands of their timber, the cedar-cutters, after disposing of all that could be che transported, or easily floated down the rivers in time of flood, le considerable surplus of felled timber to lie and rot on the ground. T they travelled farther north, to carry on the same depredations al the rivers of the neighbouring colony of Queensland. The same sy had been pursued in the gum forests of the Murray. Conside quantities of excellent timber were destroyed in the forest reserv that part of the colony, to the detriment of the district, which deprived of its natural wealth, and to the injury of the colony at which suffered the loss of much of its best timber without receiv equivalent in revenue.

fringements of the timber regulations are punishable by fine, not ding £5 for the first offence, £10 for the second, and £20 for the d, irrespective of the value of the timber and material destroyed, hich also the offender may be held responsible. The number of tions for illegally cutting and removing timber during the year 7 was 149, and convictions were obtained in 134 cases.

the reserves subject to royalty, the quantity of timber cut during of the past seven years is shown below. It will be seen that the ity has fallen off considerably :—

1891	11,760,497 sup. feet
1892	15,818,000 ,,
1893	10,506,472 ,,
1894	5,158,759 ,,
1895	4,922,707 ,,
1696	6,076,916 ,,
1897	4,820,827 ,,

dition to which a large quantity of sleepers and piles was obtained.

he revenue of the Department from forestry in 1897 was £8,327, e up as follows :—

	£
Forest reserves—	
Permit licenses	225
Timber-cutters' licenses	809
Wattle bark licenses and miscellaneous	180
Royalty	3,289
Crown lands—	
Quarry, wood-cutters', cedar, and fuel licenses	3,117
Proceeds of sale of seized timber	558
Penalties	149
Total	£8,327

here was also a sum of £433 received from miscellaneous royalty and kly-pear leases. The cost of administering the Department during year was £3,700, as compared with £8,356 in 1896, the large uction being due to the assumption of the duties of forester, in a large mber of cases, by the Inspectors of Conditional Purchases, who are id as such by the Department of Lands. The amount received from e forest reserves and forest lands of the Crown in each year since the ulations were proclaimed on the 24th September, 1878, is shown low :—

	£		£
1679	7,310	1889	16,521
1880	8,328	1890	15,437
1881	10,156	1891	18,455
1882	12,327	1892	16,176
1883	16,301	1893	9,547
1884	17,565	1894	6,350
1885	13,144	1895	6,534
1886	13,934	1896	8,727
1887	13,629	1897	8,760
1888	19,019		

During the five years 1894–98, 97,353 acres of red gum forests acres of pine forests, and 2,000 acres of coastal forests were i by thinning-out and destroying the superabundant growth work was carried out with the object of ensuring the matu larger number of trees to the acre, and, in consequence of ditional light and air afforded, of their reaching that stage two-thirds of the time that would be taken under natural co The cost of the thinning-out operations averaged 7s. 6d. per ac red gum areas, 4s. 5d. in the pine areas, and 7s. in the coast and it is estimated that this outlay will return during the next years two or three hundred marketable trees to the acre w present unimproved average is but four or five trees.

The Forest Conservation Branch is charged with the dir a State Forest Nursery, which is situated at Gosford, in the l district of Brisbane Water, where the acclimatisation of foreign timber trees, and the conservation of such of the best in species as might be likely to disappear, have received attenti area set apart for the nursery is 65 acres, of which about is cleared and cultivated. Among the indigenous trees wh been raised there may be mentioned tallow-wood, blackbutt, b silky oak, yellow pine, Richmond River beech, the best var ironbark, and red cedar; besides a large number of indigen exotic shrubs, for the ornamentation of parks, hospital grounds, re reserves, and other public properties, from 40,000 to 50,000 pla annually raised and distributed. Every year the surplus stock is used in improving the uncultivated part of the nursery, formation of avenues and ornamental plots. As the different mature, the seeds are collected, and either used for the purpose o fresh stocks, or exchanged for the seeds of varieties indigenous t countries. Thus the nursery is gradually being made to s purpose of an arboretum.

So far as the raising of native timbers is concerned, how Gosford Nursery is now but little used. As a matter of planting of hardwood seeds has proved so far from successful t a small proportion of the seedlings have grown when replanted el and it is open to doubt whether Australian hardwoods, when nurseries, can be grown with any degree of success for the p producing marketable timber. It is not only in this colony th to grow the transplanted seedlings have given but barren re similar experience has been gained in other countries, where it found that the blue gum (*E. globulus*) and other hardwoo planted, never grow to any size, and lose their best characte the foreign soil. But against this disappointing fact may be pl abundant proof to be found throughout the forest reserves th all the hardwoods of the colony reafforest themselves when t trees are cut down, and what is required is protection for th trees, which, indeed, they are sadly in need of. At the pres e young trees are cut down in hundreds of thousands annually for ing props and other purposes which could be more effectually served plit timber from mature trees, although, perhaps, the first cost might eater. These remarks may not also apply to all the semi-hardwoods, as the fancy and figured brush timbers, or to all the softwoods; in the case of the red cedar, it has been demonstrated in the Don igo reserves and elsewhere that the seedlings will not thrive when ted in the open. At Don Dorrigo, some years ago, spaces were red around the young cedar trees for the purpose of admitting light air; but the experiment was not successful, the young trees growing their natural state in an adjoining position proving the better in parison.

he consumption of wattle-bark is very great in the colony, where s in large demand for tanning purposes. During 1897, 44,312 of wattle-bark were imported, valued at £11,010, nearly 35,000 cwt. this supply being obtained from Tasmania. It will thus be readily n that there is room for a large development of the trade in New th Wales. The Forest Department has taken steps to prevent the iscriminate stripping of the bark and the destruction of the trees, ich should have the effect of stimulating the industry. The license s actually charged for stripping wattle-bark in the various districts of colony range from 10s. to 15s. per month, although the regulations ose fees ranging to 40s. per month.

Forestry is as yet only in its initial stages in New South Wales, and fact in Australasia, and the establishment of a School of Forestry has en strongly advocated from time to time. Such a School of Forestry, ere youths fresh from the higher schools could have imparted to them und practical knowledge of the many valuable timbers of the colony, gether with sufficient botanical instruction to enable them to make a per classification when called upon to do so, would, no doubt, be erly availed of by those desirous of qualifying as timber experts.

EXPORT OF TIMBER.

The depression which affected the industrial life of Australia, in mmon with that of most other lands, has had the good effect of wing how desirable it is to diversify the industries of the country. the past there was an undoubted lack of enterprise in pushing an ort trade, a disposition being evinced to rest content with what was g done in this direction with a few products of the pastoral and ing industries. This apathy seems now to have been shaken off, and s very probable that the near future will see a large increase in the ments of domestic produce, and a successful attempt made to supply l wants with various descriptions of goods which are now imported. h no article of commerce was the failure to approach consumers he densely-populated countries of the old world more marked than n timber. Although New South Wales is rich in hardwoods most suitable for use in the various forms of engineering construct an opening for this class of timber has long existed in Eu America, until recently but little had been done to open up a tr those countries. For many years the development of the loc trade proceeded on the assumption that the forests of the colony a never-failing supply of merchantable woods; this mistaken i not now entertained, for the supply of some of the most popul hardwoods seems to be somewhat limited for an export trad there can be little doubt that there is for the present abundance timber of every description, and, if steps be taken to protect th trees, there need be no fear for the future. The indigenous tre colony are being supplemented by the planting of good foreig and it has been stated, on expert authority, that the soil and cl New South Wales are suitable to the growth of the favourite p hardwoods of commerce. It is, therefore, certain that, with the of a reasonable amount of foresight, New South Wales would b favourably compete for a portion of the trade of countries less ad ously placed in respect of this important article.

The timber resources of New South Wales are more valua those of any of the other colonies, and include at least twelve species of hardwood trees suitable for export. Notwithstand however, the export trade of the colony is exceeded by that of Australia and of New Zealand. This will be seen from the f table, which gives the exports of domestic timber of each of th colonies during the past seven years. Shooks and staves, doors and other shaped articles are included in the figures; and sanda credited to the colony of Western Australia:—

Colony.	Exports of Timber.					
	1891.	1892.	1893.	1894.	1895.	1896.
	£	£	£	£	£	£
N. S. Wales....	53,780	59,028	41,565	34,030	45,029	46,830
Victoria	20,951	10,637	7,083	5,940	8,214	11,991
Queensland	16,671	17,925	5,187	2,720	2,570	5,304
South Australia..	926	830	97	54	105	247
West'n Australia	126,776	121,289	66,048	98,234	119,009	182,220
Tasmania	44,778	39,301	18,090	20,347	32,685	32,997
New Zealand ...	189,760	92,866	106,603	122,686	147,511	130,109

The decline in the values evidenced in some of the years qu due to the stoppage of public and private works, consequent disturbed financial conditions prevailing in Australasia, the trad been very largely an intercolonial one. It will be noticed, howe trade is everywhere reviving. The efforts made during the years to capture a portion of the large timber trade of the dom are beginning to bear fruit, and the export returns show a nuous improvement. At first sight it may appear strange that ern Australia should lead the way here, its exports to the United dom in 1898 being valued at £48,837. There is nothing surprising is fact, however, when it is remembered that, for years before New h Wales took steps to advertise the value of its timbers, both the rnment and the private firms of Western Australia had steadily persistently advocated the claims of their woods in the European ets, and had consequently secured a sound footing there before the er colony seriously entered into the trade. Perhaps the only regret- result of this state of things was that European buyers, having brought into contact with the Jarrah and Karri of Western ralia, acquired the impression that only red-coloured hardwoods d be durable, and were inclined to look askance at the pale-coloured ers of New South Wales, such as Blackbutt and Tallow-wood. To e extent this absurd prejudice has been overcome, but not altogether. a matter of fact, this colony possesses at least half-a-dozen distinct eties of eucalypt which are equal in all respects to the Western ralian woods in durability and suitability for wood-paving.

ccording to the Customs returns, New Zealand comes second in trade with England, the value of its domestic exports to Great ain during 1897 being £19,681. This trade, however, consists of well-known Kauri pine, for New Zealand affords one of the best kets for the hardwoods of New South Wales. At the present time timber merchants of the mother colony are executing orders from New Zealand Railway authorities for 3½ million superficial feet of bark, and half a million superficial feet of tallow-wood, while large ers are annually received from the Harbour Boards and other con- cting bodies. It is rare, indeed, for any of the Union Steamship pany's steamers to leave Sydney or Newcastle without consign- nts of hardwood for New Zealand.

n addition to its intercolonial trade, in which New Zealand plays so ortant a part, New South Wales has, as already stated, a growing le with the United Kingdom, which in 1897 was represented in the toms returns by a value of £13,560. These figures, however, are rded with grave doubt by those in a position to gauge the exports imber to Europe, and are believed to understate the actual trade, ibly because shippers do not care to let their rivals know the state heir business. Since 1896 the value of New South Wales timbers been well advertised throughout Great Britain and the Continent, an appreciable increase in the exports has been the result. Of se, the process of building up such a trade must necessarily be , for it will take time to prove to the municipal corporations and r users that the hardwoods of this colony are superior to all other ers for wood-paving purposes—with the exception, perhaps, of tern Australian Jarrah, which is, without doubt, a first-class timber. to the present, the results, so far as they have gone, are satisfactory.

During the past twelve months, the hardwood sawmills have bee going to their fullest capacity in cutting for home consumption the export trade; prices of timber have risen, and the many ha of men employed in the industry are enjoying increased prosperi

The following table shows the value of the timber shipped t country from New South Wales in 1897, according to the C returns:—

Country.	Value.	Country.	Va
	£		
New Zealand	21,338	Switzerland	
United Kingdom	13,560	New Britain	
Victoria	5,143	Cape Colony	
Queensland	4,673	New Guinea	
South Sea Islands	2,846	Tasmania	
Western Australia	2,464	Belgium	
South Australia	1,570	New Caledonia	
Fiji	1,377	Germany	
Netherlands	1,251	Other Countries	
Cochin China	884		
		Total £	

The other colonies of Australasia took 59·62 per cent. of the ex and the islands of Polynesia, 9·86 per cent. The proportion of per cent. went to the United Kingdom, as compared with 27·08 per in 1896, 23·98 per cent. in 1895, and 3·68 per cent. in 1894, the of the timber sent there being £13,560.

The exports in 1897 were made up of the following:—

Description.	Quantity.	Value
		£
Dressed timber	176,707 sup. ft.	1,144
Rough "	10,378,626 "	50,930
Houses	19 No.	2,109
Sleepers	2,062 "	607
Palings	650 "	6
Posts and rails	3,793 "	186
Doors	132 "	72
Sashes	1,390 "	340
Shooks and staves	8,004 pkgs.	1,490
Shingles	7,500 No.	8
Spars	31 "	21
Paving blocks	51,500 "	257
Piles	1,586 "	2,613
Shutters	6 "	3
Total	....	59,786

withstanding the great natural resources of the colony, the rts of timber are very considerable and largely exceed the exports, alue of the import trade in 1897 being £430,061. Of this sum, ver, re-exports to the value of £26,876 were made, leaving the rts for local use at £403,185. The bulk of the timber which comes the colony consists of pines and other soft woods, the native pine in some respects inferior to Oregon and Kauri, but there are other oods equal to any of the timbers imported. The imports g the year consisted of dressed timber valued at £65,567, rough er estimated at £328,753, and sundries, such as doors, sashes, s and staves, laths, shingles, and palings, worth £35,741. The of the dressed timber in 1897 came from Norway, which supplied ss than 5,092,640 sup. feet out of a total of 8,723,450 sup. feet rted. The United States came second with 1,495,318 feet; while 035 feet were imported from Victoria, 504,008 feet from South ralia, 397,295 feet from Germany, 239,064 feet from New Zealand, 123 feet from the United Kingdom, and 161,919 feet from Canada; of the rough logs 25,513,065 feet came from the United States, 54,941 feet from South Australia, 16,602,583 feet from New Zealand, 2,273,556 feet from Canada. The bulk of the United States rts are from Port Eureka, California; and the Canadian, from et Sound. The trade returns show a somewhat large importation the neighbouring colonies, but those colonies are not the places re the timber was grown. Victoria supplies the Riverina district; South Australia, Broken Hill, where there is a large demand for er for mining purposes.

he figures which have been given show how small is the export e of New South Wales in timber, and how open it is to develop- t. It is in the hardwoods of the country that the chief expansion rade may be looked for. Australian hardwood trees are remarkable the great size of the beams which may be obtained from them, as l as for the extreme strength and durability of their wood. From table given on page 68, it will be seen that the grey ironbark has sistance to breaking equal to 17,900 lb. per square inch, as com- ed with a mean of 11,800 for English oak, and 15,500 for teak. ne of the other timbers of the colony has so high a resistance reaking as this description of ironbark; but nearly all the varieties e a greater strength than oak. The absence of branches for the ater portion of the height enables the timber to be obtained to the advantage; and as full-grown trees of most varieties are rarely than 100 feet high, with corresponding girth, the quantity of timber inable is very large. It will easily be seen, therefore, that the bers of the colony are in every way suitable for building con- ction, wood-blocking, jetties, railway carriages, and other work in ch durability is required. That the United Kingdom offers un- ted scope for the woods of New South Wales may be judged from fact that it annually imports timber to the value of £25,000,000, or considerably more than the value of the whole domestic exp the colony. In 1897 its import trade in timber came to £25,76 composed as follows:—

	£
Hewn:—	
Fir	3,584,949
Oak	1,020,771
Teak	867,083
Unenumerated	307,836
Sawn:—	
Fir	16,115,306
Unenumerated	524,625
Staves	569,572
Furniture woods and hardwoods:—	
Mahogany	658,188
Unenumerated	972,237
House frames, fittings, etc.	1,146,240
Total	£25,766,807

In this trade Australasia, with its valuable resources, shared extent of about £165,000, or 0·64 per cent. The largest parti was Canada, with £5,546,073; Sweden's share was £5,224,43 Russia's, £5,022,887; that of the United States, £3,778,659; Norway supplied £1,866,550; Germany, £1,369,040; France, £77 and Burmah, £678,999. The hewn fir was pretty fairly distribute the great countries of Europe; the United States and Canada se greater part of the oak; Burmah supplied from its forests three-f of the teak; while more than half of the unenumerated hewn timb furnished by Canada. The kingdoms of Norway and Sweden, the R Empire, the Canadian Dominion, and the United States of A supplied the sawn pine; and the staves were principally the prod Germany, Russia, and the United States. The largest suppl mahogany came from Mexico, British Honduras, the United State the West Coast of Africa, which between them furnished 59,317 73,476 tons of this favourite wood with English furniture-m Included in the sum of £972,237 shown as the value of other "fur woods and hardwoods" imported, is £105,145—the value of 26,09 of timber imported from the colonies of Australasia. Western Au took the largest share with £69,631; then followed New South with £30,435; Tasmania, with £2,609; and Queensland, with £ The shipments from the other colonies were very small, amount but £521 from Victoria, £353 from South Australia, and £1 New Zealand. The house frames, fittings, and joiners' and cabin were mostly furnished by the United States, Germany, Sweden, B and France.

It is impossible to say how much of the timber exports of countries could be displaced in the United Kingdom by Au hardwoods and fancy timbers, but that the quantity is consi cannot be doubted. Importers there have taken the best kinds

e purposes they had in view, and for the past two years New
Wales has been labouring to show, by the distribution of pam-
s and in other ways—and not, as has already been pointed out,
out some success, even at this early date—that many of its species
ees produce superior woods to those now used for certain classes of
. In the British Isles, whose coasts are so thickly studded with
ours, a vast quantity of timber is used for piers and jetties; and
his class of work the turpentine, grey gum, and box timbers are
well fitted as compared with the woods of other countries, having
ch longer life. For other constructive outdoor work, both above
below ground, in which strength and durability are desirable, for
ay sleepers, and the paving of streets, the hardwoods of the colony
ery suitable, while some kinds, such as the mountain ash, are
for the making of furniture. At the Chicago Exhibition the
missioners for New South Wales Railways showed six sleepers, three
hich had been taken out of the Suburban line after being in the road
wenty-four years, and three out of the Western line, near the
w Zig Zag, which had been in the road for twenty-three years;
these sleepers were but little the worse for wear. The Forest
rtment also exhibited railway sleepers, made of ironbark and red
which had stood the test of seventeen to twenty-five years' constant

A portion of the New South Wales Court was laid with wooden
s of blue gum, blackbutt, tallowwood, forest mahogany, and box-
, showing the suitability of these hardwoods for paving purposes.
bark was also tried for this purpose, but was not successful, being
lippery on the surface. The utility of many woods for such pur-
has been proved in Sydney, the blocks, after subjection to heavy
continuous traffic for nearly ten years, having exhibited but slight
. Professor Warren, in his work on "Australian Timbers," states
he is continually being shown specimens of timber, taken from
es or piles in damp ground, which have been in use for forty to
years or more, and show no signs of decay whatever.

part from the progress which has been made in bringing New South
timbers under the notice of English buyers, the foundation of what
hoped may become a profitable trade has been laid on the Continent
urope. In France and Germany there is an immense opening, not
for hardwoods for wood-paving and railway-carriage and waggon-
ing, but for softwoods, particularly the red-coloured varieties, for
et-work. At first the German people were inclined to doubt the
ments published in regard to the timbers of this colony, but they have
become fully alive to their value, and are beginning to buy largely,
erman steamers leaving Sydney taking consignments for Hamburg
other cities almost weekly. Also, Belgium has lately begun to buy
South Wales turpentine wood; in fact, there are no bounds to the
bilities of the export trade, provided only suitable varieties are sent
. Some time ago the Government appointed an officer to inspect
rand timber for export; but only limited advantage is taken of this

system by shippers, and it would be an undoubted benefit to the
as well as to buyers, if inspection were made compulsory, for the
disguising the fact that in the New South Wales forests are to b
timbers of inferior quality but so alike in colour to the best ha
that deception could easily be practised, and their shipment wou
a very prejudicial effect on trade in future years.

It is estimated by the Forestry Department that the area of ir
lands belonging to the Crown is 16,870,000 acres, on which t
sufficient timber ready for cutting to yield 167½ million sleepe
that if private lands are also taken into account the number of ir
sleepers alone which the colony can produce may be set down
millions, sufficient for no less than a quarter of a million m
railway track. It does not follow, however, that there is any app
supply of this wood available for export to Europe, for agai
figures quoted have to be placed the large quantities of ironbark u
annually for the public works of the colony, and for New Zeala
other provinces of Australasia, while so far no provision has bee
for the protection of the young trees for future generations.
matter of fact, the export of ironbark, as well as turpentine a
mahogany, is to be deprecated, for these three woods are be
very scarce, and the remaining supply may well be retained for
consumption. Nothing is to be gained from the shipment of
timbers; there are others, equally good for many of the re
purposes, of which there are abundant supplies, such as grey gu
gum, blackbutt, spotted gum, brush box, and turpentine. Cer
for structural purposes, none of these will compare with iron
breaking strain, but it is only a matter of increasing the memb
an inch or two to secure equal results. In point of durability, s
the kinds named will bear favourable comparison with ironbark,
for piles, for which this timber is universally used, it is excelled b
gum and turpentine. One result of its wholesale export is the
cost to the Department of Public Works of sawn ironbark fo
bridge work throughout the colony. Some idea of this may be
from the fact that whereas two years ago sawn ironbark for th
ticular class of work could be readily purchased in Sydney i
quantities at 14s. per 100 superficial feet, it is now only obtain
small quantities at 28s. to 30s. per 100 superficial feet. Tallow
for bridge-decking has also increased in price from 9s. 6d. to 1
100 superficial feet to 12s. to 12s. 6d.

The following is a list of the best of the New South Wale
woods, with the purposes for which they are most suited :—

Blackbutt.—A height of 100 to 200 feet is attained by thi
and its diameter ranges from 3 to 8 feet. It has even bee
measuring 15 feet across, but this width is exceptional. It
first-class wood, strong and durable, and suitable for house co
bridge planking, paving blocks, ships' decks, and other purpo
similar kind.

.—This tree reaches a height of 100 to 120 feet, with a 3 to 5 feet. The timber is strong and durable, straight in s easy to work. It is used in building construction and ;, and for ships' planks, wheel naves and felloes, paving An inferior growth of the same tree is known by the *ooded Gum.*

ahogany.—The height of this tree ranges from 60 to 120 diameter from 3 to 5 feet. Its wood is red in colour, and d durable. It is suitable for paving blocks, fencing, beams, l rough carpentry, while experts from Canada and elsewhere unced it suitable for high-class cabinet-work, if properly

ıbark.—This tree, which grows to a height of 100 to 150 diameter of 2 to 5 feet, gives one of the very best of hard- is hard, heavy, tough, inlocked, and durable. It is suitable rders of bridges, railway sleepers, poles and shafts of carriages, ike purposes.

s Ash.—This tree reaches a height of 100 to 150 feet, with a 3 to 4 feet. Its wood is tough, durable, and elastic; and it r. The timber is suitable for staves of casks, shingles, poles, ıys, palings, rails, rough buildings, and some classes of furniture.

leaved Ironbark.—A height of 100 to 150 feet is attained by rith a diameter of 2 to 3 feet. Its wood is hard, heavy, érlocked, and durable; and is suitable for railway sleepers, ıkes of wheels, poles and shafts of carriages, etc.

r.—This tree grows to mammoth size in the Southern districts ony. The timber is strong, durable, and fairly straight- It is used for paving blocks, posts, building purposes, way sleepers, etc.

ıbark.—This eucalypt grows to a height of 100 to 150 feet, neter of 3 to 5 feet. Its wood is highly valued for all pur- ıich strength and durability are required. Large beams and ilway sleepers, and draw-poles, are some of the purposes for extensively used.

'ale Ironbark.—This tree attains a height similar to that of onbark, with a diameter of 4 to 5 feet. Its wood is highly l, being hard, tough, strong, inlocked, and durable. It is used onstruction, and for railway carriages, poles of drays, spokes piles, beams, and other similar purposes.

Gum.—This eucalypt derives its vernacular name from the earance of its bark. It grows to a height of 100 to 150 feet, neter of 2 to 4 feet. The timber is strong, close-grained, l durable; and it splits well. It is suitable for paving blocks, house building, girders, coopers' staves, cart and buggy

Stringybark.—The *Eucalyptus microrrhyncha*, or stringy-bark, to a height of 50 to 100 feet, and a diameter of 24 to 54 inche gives a light, hard, strong, and close-grained wood, which polishe House carpentry, flooring-boards, and fencing are some of the pu for which it is most suited.

Tallow-wood.—This tree, which grows to a height of 100 to 15 with a diameter of 6 to 8 feet, gives a strong, durable, and han wood, which shrinks less than most Australian hardwoods, rarely splits or shells. It is largely used for building purposes, e ally for flooring; and for boat-building, piles, bridge-decking, paving-blocks. The flooring of the fine new building of the Equ Life Assurance Society of the United States, in Sydney, has laid in parquetry with this wood.

Turpentine.—A height of 150 to 200 feet, with a diameter of 3 to is attained by this tree, the timber of which is much valued for paving-blocks, posts, ship-building, girders, and other constructive poses, being strong, hard, heavy, and durable, and most difficult to

White Box.—This tree grows from 50 to 60 feet in height, w diameter of 20 to 40 inches. The timber is hard, tough, and du and possesses great lateral strength. It is suitable for naves, f scantlings, jetty, and bridge-piles, planking, fencing, etc.

Woollybutt.—This eucalypt reaches 100 to 150 feet in height, w diameter of 3 to 5 feet. The timber, which is strong and dura suitable for house-building, wheelwrights' work, fencing, felloes, s shafts, etc.

Present market rates in Sydney of the principal hardwood ti are as follow :—

Kind of Timber.	Round piles: per running foot.		Girders: per cubic foot.		Scantling: per 100 sup. feet.		Sawn timber i sizes, other th ling, free from		
	s.	d.	s.	d.	s.	d.	s.	d.	
Blackbutt	1	4	1	6	8	0	10	6	to
Blue gum	1	4	1	6	8	0	10	6	,,
Brush box	1	3	1	7	9	0	10	6	,,
Forest mahogany	1	4	1	7	9	6	12	6	,,
Grey ironbark	1	7	1	9	10	0	14	0	,,
Grey gum	1	6	1	8	9	6	11	6	,,
Mountain ash	1	5	1	8	10	0	12	0	,,
Narrow leaved ironbark	1	7	1	9	10	0	14	0	,,
Red ironbark	1	7	1	9	10	0	14	0	,,
She or pale ironbark	1	7	1	9	10	0	14	0	,,
Spotted gum	1	4	1	6	9	0	10	6	,,
Stringybark	1	3	1	6	8	6	10	0	,,
Tallow wood	1	6	1	9	9	6	12	6	,,
Turpentine	1	3	1	6	9	0	10	6	,,
White box	1	3	1	6	9	0	10	6	,,
Woolly-butt	1	3	1	5	8	6	9	6	,,

e cost of putting the timber on board vessels in Sydney is 9d. per superficial feet, in addition to the prices quoted above. The freight Sydney to London may be stated at 5s. to 6s. per 100 superficial for sailing vessels, and 8s. to 10s. for steamers. Wood-blocking er is always shipped in full cut sizes, but in long lengths, say 15 to eet, in order to prevent cracking and the extra expense of handling; an, therefore, only be quoted, as in the table above, at per 100 rficial feet. Moreover, the wooden blocks used by the municipalities ngland vary in size.

he softwoods of the colony are found chiefly in the brush forests of coast district, and rival those of any other part of the world. Some e least known of the brush forest trees have wood grained and ked most beautifully, which is capable of receiving the highest polish, e others are fragrantly perfumed. These woods are adapted to the st description of cabinet-meeting, and it is strange that their merits ld have so long escaped attention. Amongst the chief varieties of ds of this class may be mentioned the red cedar, now unfortunately ppearing, the beautiful wood of which, somewhat resembling ogany, is admirably adapted for the finer kinds of cabinet-makers' k. Some of the cedar trees grow to immense size, as much as 2,500 c feet of valuable timber having been obtained from one tree. In tion to the cedar may be mentioned rosewood, tulipwood, yellow-d, white maple, white beech, myall, marblewood, mock orange, red and k bean, and many others. Besides their use for cabinet-making, y of the brush timbers are of great utility for the rougher kinds of pentry, while some, both hard and soft woods, are admirably adapted coach-builders' and coopers' work. The chief description of pine wing in New South Wales is the Moreton Bay white pine, found in coast districts, as far south as the Bellinger. It is soft, light, and easily ught, and suitable for all the interior woodwork of houses, as well as cabinet-making. The red or black pine is extensively distributed r the Liverpool Plains, and in the Lachlan and Darling River tricts, as well as around Berrima. It is beautifully marked in the in, takes a fine polish, and has an agreeable fragrance. There are nerous other varieties of pine, but these resemble in their main tures the trees already described. Colonial deal is an excellent ber, and is obtained in very large scantling, the tree frequently hing 120 feet in height. It is soft, close-grained, easily wrought, remarkably free from knots. Its use, therefore, is extensive for inet-makers' work and house fittings.

he beauty of colour and grain of many of these fancy timbers ld, doubtless, cause them to be highly prized by furniture makers, hey were brought under their notice. Even if they could not be ed in London at the rates paid for the woods which are popular cabinet-makers there at present, that would only be a slight draw-k, as a large proportion of the British public are willing to pay igher price for an article if they can thereby obtain something uncommonly beautiful. A description of some of the best of and fancy woods of the colony, with their market values, etc., below in the same manner as the hardwoods have already be with :—

Beech.—This tree, which attains a height of 100 to 150 feet diameter of 3 to 5 feet, is one of the most useful of New South trees, giving a strong, white, close-grained, and durable wood, easily worked, and is greatly valued for decks of vessels, turnery, and furniture-making. It is very suitable for bedroom

Blackbean.—This tree grows to a height of 120 to 130 feet, diameter of 4 to 5 feet. The wood is handsome, dark-colour grained, and durable. It greatly resembles walnut, and is suitable for cabinet-making. Very handsome gun-stocks ha made of this timber.

Black Oak.—This timber, which grows from 40 to 50 feet in with a diameter of 18 to 24 inches, is also suitable for cabinet- It is used in the colony for bullock yokes, mauls, tool hand shingles.

Blackwood reaches a height of 50 to 80 feet in New South with a diameter of 18 to 24 inches. Like blackbean, the timber resembles walnut, and is one of the colony's most serviceable f woods. It is highly valued for all kinds of cabinet-work, billiard and carriage building.

Coachwood is a light, soft, fragrant, close-grained, and tough is suitable for coach and boat building, and for cabinet-work. to a height of 50 to 70 feet, with a diameter of 12 to 24 inches.

Colonial Pine reaches a height of 150 to 200 feet, with a dia 2 to 4 feet. The wood is pale in colour, and is strong and du kept continually dry or wet, but it soon decays if exposed alt to dryness and dampness. It gives spars 80 to 100 feet long.

Common or White Pine varies in colour from light to dark br is a very durable, knotty wood, takes a good polish, and has a of camphor. It is used for building purposes. The timber a height of 60 to 70 feet, with a diameter of 18 to 24 inches.

Forest Oak is another valuable wood for cabinet-making. handsome timber, rather heavy. The tree grows to a height of with a diameter of 2 feet.

Rosewood is one of the largest and best of the trees of the It is a strong, close-grained, and durable timber, red in colour, a scented, and is of the greatest value for all kinds of cabinet-w would make an excellent substitute for mahogany, which is used by English cabinet-makers. The tree reaches a height of and its diameter is 4 to 6 feet.

Myall.—This tree grows to a height of 30 to 40 feet, with a of 18 to 20 inches. It is a hard, durable wood, and is greatly for the manufacture of glove and handkerchief boxes, etc., perfume of violets when unpolished.

lip-wood, which grows to a height of 50 to 60 feet, is a close-ned, hard, and firm timber. Its appearance is uncommon and ctive, being marked with irregular, longitudinal streaks of black yellow, and it takes a fine polish. It would make handsome suites rniture.

lky Oak.—The *Grevillea robusta*, which attains a height of 70 to 80 is one of the most suitable woods of the colony for boudoir and oom suites. Its colour is a light grey, beautifully crossed with ry waves. It possesses a delicate lustre when polished.

d Cedar.—This is a beautiful wood, much valued for the manufacture rniture and for fittings of houses and ships. It is of a dark red ur, and, although light and easily wrought, is very durable. The commonly grows to a height of 100 feet, with a diameter of 6 feet; it has been found 200 feet high, and of a diameter of 10 feet.

ellow Cedar grows to a height of 50 to 60 feet, and a diameter of 3 feet. It is close-grained and durable, and polishes well. The ber is suitable for cabinet, carving, turning, and fancy work.

ellow-wood.—The *Daphnandra micrantha* attains a height of 100 20 feet, with a diameter of 3 feet. The wood is yellow in colour, fragrant; it is close-grained, easily wrought, and polishes well, and ry suitable for cabinet-making.

Satinwood is another timber yellow in colour. It is soft and silky to touch, close-grained, and easily wrought. This wood is also suitable cabinet-making, and is considered to be superior to the satinwood d in the English furniture trade.

Lignum Vitæ.—This is another white beech. It is smaller in its pro-tions than the beech already described, and grows to a height of to 80 feet, with a diameter of 2 feet. It is used for similar purposes.

The following table shows the values in Sydney of the softwoods enu-rated above, cut in planks or flitches:—

Kind of Timber.	Per 100 sup. ft.	Kind of Timber.	Per 100 sup. ft.
	s. d.		s. d.
Blackbean	22 6	Myall	35 0
Black oak	25 0	Tulip-wood	40 0
Blackwood	30 0	Silky Oak...........	25 0
Coachwood...........	22 6	Red cedar	30 0
Colonial pine........	12 0	Yellow cedar	30 0
White pine	14 0	Yellow-wood	25 0
Forest oak...........	27 6	Satinwood	30 0
Rosewood	15s. to 21s.	Lignum vitæ	24 0

EUCALYPTUS OIL.

A volatile oil, which is extensively used for medicinal purp in manufactures, is distilled from the leaves of the eucalyptus Australia and Tasmania. The quantity of oil obtained varies ac to the species and the district in which it is found ; but the per yielded by a few of the best known kinds may be set down as u

Eucalyptus amygdalina	3·313 per cent.
,, *oleosa*	1·250 ,,
,, *leucoxylon*	1·060 ,,
,, *goniocalyx*	0·914 ,,
,, *globulus*	0·719 ,,

The *E. amygdalina* and the *E. globulus* give the principal oils merce. The latter species takes kindly to foreign soil and clim its cultivation has rendered habitable parts of countries which ot would have been hot-beds of fever. Algeria and California are able competitors with Australia and Tasmania for the supply requirements of the world in the matter of eucalyptus oil. A of the exports of this article is only kept at Sydney. In 1 shipments from this port consisted of the following:—

Country.	Packages.	Value.
	No.	£
Germany	145	1,038
Japan	5	14
United States	2	11
New Guinea	1	3
Total	153	1,066

FISHERIES.

The seas that wash the shores of New South Wales abou fish, but this source of wealth to the colony has been greatly ne Splendid fishing-grounds extend along the whole length of th which presents many natural features peculiarly favourable existence of a very large supply of the best food fishes. In th waters of its numerous bays and estuaries, and in the vast la lagoons communicating with the sea, are found shelter and sust as well as excellent breeding-grounds. The principal fishes fo the coast are not migratory, and as a consequence may nearly be procured in the market. It is unnecessary to dwell here value of the many food fishes to be found in the waters of the as that has already been dealt with in the chapter on "Fauna"; be sufficient to repeat that the late Rev. J. E. Tenison-Woods pl t has frequently given its attention to the matter, with, ut barren results up to the present time.

st effort of the Government to place the industry on a basis it might be built up to the large proportions to which it ought o attain was the appointment of a Royal Commission in 1894 rpose of reporting on the best means of carrying out the object This body heard a great deal of evidence on the state of the nd visited several of the other colonies in order to see per- at had been and was being done in regard to the fisheries. lt, they recommended in their report, which was presented nent in June, 1895—that further legislation be passed for e of regulating the industry; a systematic exploration of the le in a properly equipped trawling vessel, to determine the s of the deep-sea fisheries; live fish transmitted to market of well-boats; refrigerating cars adopted for transmission of ail; a central fish market erected near Darling Harbour Terminus, with urban and suburban auxiliary markets; the abolished, and authority given to fishermen to vend their fish-carts substituted for the present system of hawking t and barrow; and other proposals of an important character t. Towards the close of 1896 a Government Bill for the ulation of the fisheries and the fishing industry was prepared nted to Parliament, but the measure was dropped owing to re of business, and has not been taken up again. However, recommendations of the Commission—that which suggested xperiments off the coast—was carried into effect in 1898, the nt steamer *Thetis* being fitted out for the purpose. The ts were deemed successful; but it had not been seriously hat deep-sea fishing with the trawl could be properly con- ovided the operations were carried out by experienced hands. required is some inducement to experienced men to devote tal to the development of the fishing industry in Australian

The marine fisheries embrace three divisions—the Northe
ing from the Tweed River southerly to Port Stephens; t
division, from Port Stephens to St. George's Basin; and the
division, from St. George's Basin to Cape Howe. Each of t
sions comprises many important grounds. The inland fisheri
very important, including chiefly the rivers Murray, Murr
Lachlan, and Darling; and Lake George. Every fisherma
waters must apply for a license yearly, the fee being 10s., which
to half the amount if the license is issued in the second half of
A license must also be taken out for every fishing-boat, the fee
which likewise is reduced by one-half if granted after the 3
Penalties are imposed by the Fisheries Acts for breaches of t
tions of the Commissioners.

The number of fishing-boat licenses issued during the year
378, and the number of licenses granted to fishermen was
fees received for these 1,241 licenses amounting to £7
class of boat used for fishing purposes in New South Wales is
very little improvement is likely to result to the industry if t
fishermen are left unaided with their primitive appliances, and
a better class, provided with capital, are not induced to ta
industry. The bulk of the fish brought into Sydney comes
stations in the Home division, as the fishermen cannot venture

For the purpose of oyster culture, the Crown grants leases o
shores of tidal waters, which may be defined as between the
and mean low water mark. The rental is 20s. per annum for
linear yards. The maximum length for which a lease may be
is 2,000 yards; but as the same person may take out more
lease, the portion of shore which may be acquired is pract
restricted by the Oyster Fisheries Act. The lease may be t
term of ten years. Leases of deepwater or natural oyster bed
granted for an area not exceeding 25 acres, at a rental which
be less than £2 per acre. During the year 1897, 153 applic
leases of areas of from 100 to 1,000 yards, representing a tot
43,167 yards, were made; while at the end of the year th
leases numbered 188, and the length of foreshore held was 170,
The deposits paid with the applications for leases amounted
while the rentals received from leased areas came to £1,707
year.

Owing to bad management, the oyster-beds of Port Jack
Stephens, the Hawkesbury, and the Shoalhaven were greatly
that the markets of Sydney have to depend upon the b
Manning, the Richmond, and other northern rivers, as well
beyond the colony, for their supply of oysters. The appoi
the Fisheries Commission in 1880 probably prevented the ent
tion of the oyster industry in New South Wales, though the
of the Commission have been much impeded through lack of
legislation to enable them to check the improvidence of the le

few exceptions, strip the oyster-beds without regard to future y. There is but little doubt that the establishment of "parcs" hose which may be seen along the coasts of France and Belgium, n oyster culture is conducted on scientific principles, would be nerative, as the demand for this delicacy is great, and continually sing. During the year 1897, 14,701 bags of oysters were obtained t the tidal waters of the colony, being a satisfactory increase on the s of previous years; while in addition to this supply, 2,767 bags of rs were imported from other colonies, their value being set down 3,103. Of this quantity, 1,548 bags came from Queensland, and from New Zealand. A bag of oysters contains 3 bushels, and at beginning of 1899 the price per bag of good oysters in Sydney ed from 35s. to 40s.

THE WHALE FISHERIES.

At a time when efforts are being made to revive the whale fishery, it teresting to trace the history of what was in the early days regarded many as likely to become the staple industry of the colony. In the r 1791, three ships are recorded as having sailed from Sydney r for "the fishery." These were all convict transports, one which, the Britannia, a vessel belonging to the whaling firm of d Enderby and Sons, is said to have been the first ship to pursue fishery on the Australian coast. In 1793, Enderby joined the h Government in the expense of fitting out a ship to undertake a e to the South Seas, with a view to extend the whale fishery ; and in the following year the ships of this enterprising speculator actively engaged in whaling off the coast of New Zealand. It was custom of ships, such, for instance, as those owned by Campbell, one e earliest of Australia's merchants, to import teas and sugars from l, and British manufactures from England, such as cotton and en goods, hats, and other articles, and to obtain a return cargo of d skins, although the oil export was relinquished subsequently on nt of the duty imposed on its importation into England. The whale ry was particularly flourishing during the first years of the colony's ement, and it afforded employment to a considerable number of ons. In 1802, ships were again despatched to pursue the whaling stry off the coast of New Zealand; but according to the evidence Mr. Campbell, given in 1812, the oil-fishery in Australian waters was entirely stopped, as the duty and the heavy freights prevented its portation into England, and colonial vessels were not allowed to igate beyond the limits of the territory. The sealing industry , however, continuously pursued. In 1823, the firm of Enderby Sons fitted out a ship to prosecute the fishery off the Seychelle nds, and the southern branch of the industry experienced a decided ival.

Up to this time no sperm oil had arrived in England save that imported the ships engaged in the actual fishery of the animal, but in 1823 or other machinery for extracting gold becomes entitled. Special of increased areas may also be granted for gold-mining purposes unusual difficulties exist in working the ground; but in any su the maximum area cannot exceed 100 acres. The number of m rights issued during 1897 was 29,455, and the revenue derived from amounted to £5,477.

It is only the holder of a miner's right who may take gold-mining lease. The area for which an ordinary lease is g ranges from 1 to 25 acres, or less than 1 acre by conversion of a m tenement; and the term for which it may be taken out ranges one to fifteen years. The annual rent payable is fixed at £1 pe or portion thereof; and when application is made for the lease, th year's rent must be paid, together with a survey fee ranging in a from £1 for 1 acre to £3 10s. for 20 to 25 acres. One man m employed for every 2 acres of ground taken up. No assign mortgage, sub-lease, or encumbrance can be made in connection w gold-mining lease unless with the sanction of the Secretary for The holder of a miner's right or of a lease under the Act of 1874 apply for a permit to mine for gold or for any other mineral roads, streets, navigable waters, or commons or reserves. The payable under an authority to mine for gold is 10s. per acre per an but in the case of small areas, the holding of miners' rights m imposed as a condition instead of the payment of rent. A perm search for gold on a residential lease on a gold-field may be grant the lessee thereof, or to any person other than the lessee, provid be the holder of a miner's right. Business licenses, operating gold-fields, are granted at the rate of 20s. per annum, or 10s. for months from date of issue. They entitle the holder to the occupat for the purpose of residence or of carrying on business, of one-qu of an acre in township sites, or of 1 acre on other Crown la Within twenty-eight clear days after the issue of the certificate of ditional registration, improvements in buildings must be made to value of £10, otherwise the area taken up is deemed to be abando During the year 1897 there were issued 2,353 business licenses, the therefrom amounting to £1,315.

Before the close of the year 1896, when an Amending Act passed, a miner's right could not be used in connection with the se for and the winning of minerals other than gold, the equival authority being termed a mineral license. Now, a miner's right co on the holder all the rights and benefits secured by a mineral lic and the fee payable for the latter, which was formerly 20s. for year, has been reduced to 5s. for twelve months and 2s. 6d. for months, as in the case of a miner's right. For the purpose of searc for opal, the holder of a miner's right or a mineral license is permi to take possession of and to occupy 400 by 400 feet of Crown la and for other minerals an area of 40 acres; but the area which ma occupied for the purpose of mining for and winning minerals is m being 100 feet by 100 feet in the case of opal, and 4 acres in the of other minerals. A mineral prospecting area is the term applied land occupied in searching for minerals, and a mineral claim that plied to land occupied in mining for and winning minerals. For the purpose of searching for coal, the holders of sixteen miners' rights or mineral licenses may conjointly take possession of not more than 640 acres as one mineral prospecting area; and for any other mineral than coal, gold, or opal, the holders of two rights or licenses may take possession of not more than 80 acres. The extent of land which may taken possession of conjointly as a mineral claim is not more than acres, by the holders of three miners' rights or mineral licenses, in case of minerals other than coal, gold, or opal; and not more than feet by 200 feet, by the holders of four miners' rights or mineral licenses, in the case of opal. Within twenty-eight days of the discovery opal, the occupier of a prospecting area must mark off and occupy a mineral claim 200 feet by 200 feet, which must be worked by not less than two men. In the case of other minerals, application must be made within thirty days of discovery for the conversion of the prospecting area into a mineral leasehold. A holder of a mineral license is allowed occupy, for the purpose of residence, a piece of land not exceeding extent a quarter of an acre, and is entitled to the use of water under certain conditions. In the course of the year 1897, 1,294 mineral licenses were issued, the revenue derivable therefrom being £235.

A mineral lease is granted for the purpose of mining for any other mineral than gold, and it is not necessary that the applicant for such should be the holder of a miner's right or a mineral license. In the case of coal the minimum area which may be leased, unless with the special consent of the Secretary for Mines, is 40 acres, and the maximum 40 acres; for other minerals the area may not be more than 80 acres, nor less than 20 acres, except, as in the case of coal, with the sanction of the Minister; but there is nothing to prevent a person holding more than one lease. The term for which a lease may be granted ranges from one to twenty years, and the annual rent, which is payable in advance, is at the rate of 5s. per acre. Coal-mining leases carry a royalty of 6d. per ton upon all coal raised, the rent being payable until the amount is exceeded by the royalty, when the latter only becomes payable. Reserved lands may be leased subject to the same conditions as Crown lands, unless the mineral sought is coal, in which case the annual rental is fixed at 2s. per acre if the surface of the land or any part of it is required, 1s. 6d. per acre where no surface is required, and 1s. per acre if wholly under water. The royalty payable, however, is the same as that charged in leases of Crown lands. The labour conditions of the leases mentioned are proposed by the applicant, and are subject to approval by the Secretary for Mines. All dealings in connection with these leases are the same as in gold-mining leases. The holder of a miner's right, or of a lease under the Act of 1874, may be granted an authority to mine for minerals under roads, streets, navigable

waters, or commons or reserves. For coal the rent is 2s. per
annum, with a royalty of 6d. per ton of large coal and 3d. p
small coal. If the royalty exceeds the rent, then the forme
payable. In the case of other minerals except gold, the royalty
is at the rate of 5 per cent. on the value, with a rent simila
charged for coal lands. In the case of small areas the hol
mineral license may be imposed as a condition in lieu of pa
rent.

At the close of the year 1897, the area held under lease
for gold was 17,524 acres, and for other minerals 71,781 acres
a total of 89,305 acres of Crown lands held under mining lease
application to lease, the area of auriferous Crown lands
9,198 acres, and of lands upon which other minerals were bein
13,466 acres, giving a total of 22,664 acres of Crown lands he
application to lease.

MINING ON PRIVATE LANDS.

Certain of the Crown lands of the colony have been aliena
time to time, subject to various reservations in respect of
other minerals which might afterwards be found therein. Ot
again, have been alienated without any such reservation; but
the established law of England that the right to the royal m
does not pass from the Crown unless by express conveyan
alienated lands has the precious metal remained the proper
State. Under the Crown Lands Act of 1884 owners of lands
under that Act, or under any Act thereby repealed, and in r
which the right to minerals was reserved by the Crown, were
permits to remove such minerals, subject to the payment of
and under the Mining Act of 1889 authorities might be issu
person to dig and search for gold and other minerals on all lan
after the commencement of the Act, might be sold conditio
auction, in virtue of improvements, or otherwise, and upon
which had been or should thereafter be leased conditionally u
Crown Lands Act of 1884; and in the event of these lands bei
to contain gold or other minerals, provision was made for the ca
of the sale or lease. The Mining on Private Lands Act, w
passed in June, 1894, provided, however, for the conversion in
leases of all permits of this kind which had been granted to o
private lands for the purpose of removing gold, silver, lead,
antimony, provided application was made within two mont
passing of the Act: and in all cases where a special lease was so
payment of royalty ceased. But in respect to all other mi
payment of royalty by owners of private lands, as reserved in
mits granted under the Crown Lands Act of 1884, and the
issue searching permits under the Mining Act of 1889, were

To gold-mining, all lands alienated or in process of alienation course, open; but to mining for the other metals, only those in respect to which the rights are expressly reserved in the Crown. The surface of lands enclosed and under cultivation is, except he consent of the owner, exempt from the provisions of the Act; ses of such lands below the surface, at such depths as may be nt to protect the surface from damage, may be granted. Lands the boundaries of any town or village are exempt, unless imed by the Governor to come within the operation of the

Crown lands held under certain forms of lease, or reserved rious public purposes, also come within the scope of the Act if a l proclamation to that effect be issued.

holder of a miner's right or a mineral license may obtain an rity, for a term not exceeding twelve months, but renewable in the tion of the warden, permitting him to enter upon private lands he purpose of prospecting for gold, silver, lead, tin, or antimony. rea is defined by the warden, having regard to the nature of the it to be sought for, and mining operations may be carried on ct to the payment of rent and compensation fixed by the warden. rent is payable quarterly in advance. The area must not exceed res in the case of ordinary auriferous lands, nor 40 acres where the ral conditions will render mining operations difficult and costly; for other minerals the maximum area is 80 acres. These authorities be converted into leases, the rent payable being £1 per acre per m. The term of the lease cannot exceed 20 years, but subject to in conditions renewal for a similar period may be obtained. In mining one man must be employed for every 5 acres; and in ing for silver, lead, tin, and antimony, one man for every 10 acres. ers of private lands may obtain special leases for mining purposes out payment of rent. They are also privileged to enter into agree-s with holders of miners' rights or mineral licenses for the latter to possession of the land for mining purposes as if it were Crown. In such cases it is not necessary to take out a lease under the; but the land must be held and worked subject to the regulations e Mining Board in force for the time being. Subject to the approval e Secretary for Mines, owners may also make agreements with ct to lands other than alluvial auriferous, or grant leases of the, the area and labour conditions being similar to those fixed and ed in connection with other leases granted under this Act. Every ment or lease of this kind must be registered within fourteen days.

prospecting license may be issued to the holder of a miner's right wering him to enter upon any private lands open to gold-mining, ot otherwise utilised under the Act, for the purpose of digging and hing for gold. Before mining operations are begun a deposit must id to cover any damage which may be caused to the surface of the d. If payable alluvial gold is discovered the land may be ned by the State, the discoverer having a preferent right to a prospecting claim. The Crown has also the power to resume la taining auriferous quartz veins, provided the consent of the ow obtained; and the prospector who discovered the vein may ap a lease.

At the close of the year 1897, the area of private lands held lease was 11,625 acres, while other 3,076 acres were held under cation to lease. On the same date, permits to mine for gold acres of reserved lands were in existence, while the area of re lands held under permits to mine for other minerals was 28,550

MINERS EMPLOYED AND PRODUCTION.

The following table gives the approximate number of persons engaged in the principal departments of mining during each of th seven years. The figures are given on the authority of the ret the Mines Department:—

Mineral.	Miners employed at end of each year.					
	1891.	1892.	1893.	1894.	1895.	1896.
Gold	11,166	9,049	11,957	17,207	21,434	22,207
Silver and silver-lead ...	7,645	5,889	4,709	4,208	4,658	5,555
Copper	481	500	283	645	868	810
Tin	1,951	1,657	2,024	1,542	1,399	1,419
Coal.........	10,820	10,514	10,028	9,131	9,022	9,233
Shale	260	396	385	297	354	227
Other minerals	185	237	736	486	564	487
Total	32,508	28,242	30,122	33,516	38,299	39,938

The value of mining machinery may be approximately set d £2,500,000. Of this, £1,071,000 represents the value of machin plant used in connection with coal and shale mines, £546,0 machinery employed on the silver-fields, £697,000 that on the gol and £186,000 that on other mineral fields, principally copper an

The summary given below shows the value of the production various minerals since their first discovery, as well as the v minerals won in the year 1897. It is difficult to separate the lead contained in the ore exported from Broken Hill and , but an estimate based on the best data available gives their lver, £18,877,577, and lead, £5,230,708.

Mineral.	Value.	
	During 1897.	To end of 1897.
	£	£
	1,088,413	44,488,371
r and silver-lead	1,698,239	24,108,285
	1,230,041	33,049,372
	40,612	1,835,825
	45,392	229,841
	49,900	6,246,418
er	283,174	4,351,343
mony	3,612	187,011
uth	800	39,012
(pig)	398	16,368
e of iron	536	7,397
ry minerals	142,203	396,081
Total value £	4,583,320	114,955,324

be seen that the colony has produced various minerals of alue of nearly one hundred and fifteen millions sterling. In with this estimate of production, it may be explained that relating to tin and copper differ from those appearing in the the Department of Mines. The ores of these metals are n large quantities to be smelted, and the refined copper and oduction of this smelting, are usually exported as domestic d appear as such in the mining returns. This, of course, is an o, from the heading "Sundry Minerals" some of the items, estone flux and building-stones, which have been included t of the Mines Department, have been rejected in preparing eturn.

METALLIC MINERALS—GOLD.

Amongst the metallic minerals found in the colony, gold occ
foremost place, both on account of the quantity which has been
now being raised, and of the influence which the discovery of the
metal has had on the settlement of the country. The date of the dis
of gold in New South Wales was for a long time the theme of
controversy, and the question as to the original discoverer was lo
puted. It is now agreed, however, that the existence of gold was k
to the authorities during the early days when the colony was a c
settlement, but for obvious State reasons the matter remained
The first authentic record of its discovery is contained in an e
from Assistant-Surveyor James McBrian's Field-book, bearing
16th February, 1823, in which the following note appears:—
8 chains 50 links to river, and marked gum-tree—at this place I
numerous particles of gold in the sand and in the hills conven
the river." The river referred to is the Fish River, at about 15
from Bathurst, not far from the spot to which the first gold-ru
made twenty-eight years afterwards.

In 1839, Count Strzelecki found gold in the Vale of Clwydd
communicated the discovery to Governor Gipps; but he was req
to keep the matter secret, lest the knowledge of the existence o
should imperil the safety and discipline of the settlement. The
W. B. Clarke also found gold in 1841, in the Macquarie Valle
the Vale of Clwydd, and expressed his belief that the precious
would be found abundantly dispersed throughout the territory. I
was not until the year 1851 that payable deposits were proved to
in New South Wales, and this important discovery was due to
Hammond Hargraves, who, on his return some time previously
California, pointed out to the Government the localities in which h
found payable deposits of alluvial gold, viz., at Lewis Ponds and Su
Hill Creek, in the districts of Bathurst and Wellington. Prosp
operations followed in the neighbourhood, with the result of
everyone is now familiar. A few weeks later, rich deposits we
covered at Ballarat, Mount Alexander, and other places in Vic
and the world witnessed a gold-rush from all parts of the earth to
colonies, similar to that which some years before had taken pl
California.

Native gold is the only true mineral species of gold which has
been found in New-South Wales, and was first met with in easily
alluvial deposits. These diggings have, until very lately, attract
greater number of miners, as the precious metal is obtained
costly appliances; but however rich they may be, alluvial depos
very soon worked out, their area generally being of limited exte
such deposits gold is found associated with a variety of minera
is found in the shape of grains and nuggets, water-worn in appe

imes of considerable size. Though New South Wales has not uggets of such an extraordinary size as those found in the ing colony of Victoria, yet some splendid specimens of that ation have been unearthed at various times. Thus in July, nass of gold was found on the Turon River gold-fields which 06 lb., or 1,272 oz. This, however, though called a "nugget," a piece of reef gold. In November, 1858, at Burrandong, ge, another nugget was found, which when melted at the Sydney e 1,182 oz. 6 dwt. of pure gold, of the value of £4,389 8s. 10d. nugget, called the Brennan, was sold in Sydney in 1851 for In 1880 and 1882, several nuggets which were unearthed at eighed from 59 to 139 oz.; and in 1887 nuggets were found ers in various parts of the country, four of which, weighing ely 357 oz., 200 oz., 47 oz., and 32 oz., were obtained at a, and another, weighing 30 oz., at Limestone Creek. The nugget, weighing 344 oz., was also discovered in that year and Bar, in the Mudgee District, and was worth about

gh the alluvial deposits discovered in the early days have been ly abandoned and are considered to be worked out, there is ample that the surface of the country has been merely scratched. ch for gold has been vigorously prosecuted for close upon entury and still new fields and fresh deposits are being dis- -in localities, too, supposed to have been thoroughly L. The gold formation is very widely diffused throughout the s may be gathered from the fact that the fields of Albert, , and Ballina are between 600 and 700 miles distant from each d it has been estimated that the extent of country covered by s in association with which gold always occurs, exceeds 70,000 iles, whilst the precious metal has also been found in formations presence was never suspected. A considerable portion of this al to nearly one-fourth of the whole surface of the colony, has n touched by the pick of the miner.

also found in quartz-veins, occurring in older and metamorphic h as argillaceous slates, chloritic and talcose schists, as well e, diorite, serpentine, and porphyry. Vein gold is associated nmonly with iron pyrites, though found with copper, lead, l silver ores, and also in asbestos. But the extraction of quartz-veins requires the erection of extensive machinery and g appliances, involving an outlay of capital such as the miner seldom possesses. Quartz-mining is generally carried npanies.

as been found in conglomerates in the Coal Measures at g, and in Carboniferous strata. The Rev. W. B. Clarke it in the Hawkesbury sandstone formation, on the north side Harbour, and he also mentions that it is distributed through t the mouth of the Richmond River. These auriferous beach sands have of late years given employment to several hundre Along the southern part of the coast of the colony, it has bee near the shore, in the sand washed by the waves of the Pacific whilst at Bermagui, and in the district extending between and Eden, important discoveries have also been made. It wo impossible to name every part of the province in which gold is as the precious metal appears throughout the greater part of th tory, and there is ample evidence that there exist deposits whi offer to the prospector or the miner a profitable field of employm many years to come.

Below will be found the quantity and value of the gold recei coinage at the Mint, and exported during each year, since 1851 New South Wales gold which was received at the Sydney M coinage in 1897 amounted to 203,415 oz., of the gross value of £7 the average price being slightly more than £3 14s. 3d. per o quantity exported during the year without passing through th was 88,802 oz., valued at £333,107 :—

Year.	Quantity.	Value.	Year.	Quantity.	Val
	oz.	£		oz.	
1851	144,120	468,336	1876	167,411	61
1852	818,751	2,660,946	1877	124,110	47
1853	548,052	1,781,172	1878	119,665	43
1854	237,910	773,209	1879	109,649	46
1855	171,367	654,594	1880	118,600	44
1856	184,600	689,174	1881	149,627	56
1857	175,949	674,477	1882	140,469	52
1858	286,798	1,104,175	1883	123,805	45
1859	329,363	1,259,127	1884	107,198	39
1860	384,053	1,465,373	1885	103,736	37
1861	465,685	1,806,171	1886	101,416	39
1862	640,622	2,467,780	1887	110,288	39
1863	466,111	1,796,170	1888	87,503	31
1864	340,267	1,304,926	1889	119,759	43
1865	320,316	1,231,243	1890	127,760	46
1866	290,014	1,116,404	1891	153,336	55
1867	271,886	1,053,578	1892	156,870	56
1868	255,662	994,665	1893	179,288	65
1869	251,491	974,149	1894	324,787	1,15
1870	240,858	931,016	1895	360,165	1,31
1871	323,609	1,250,485	1896	296,072	1,07
1872	425,129	1,643,582	1897	292,217	1,08
1873	361,784	1,395,175			
1874	270,823	1,040,329	Total	12,009,833	44,48
1875	230,882	877,694			

It will be seen that the value of the gold won in 1897, althoug high as in 1894 and 1895, exceeded that of any other year sinc In 1898 the production was 340,494 ounces, valued at £1,

ng the total output 12,350,327 ounces, valued at £45,732,701.
a well-known fact that in years of prosperity and easily-obtained
oyment persons are attracted from gold-mining to other pursuits
h offer smaller chances of accumulating rapid fortunes, but steadier
oyment and more security against loss, while the stoppage of this
oyment forces people to turn to mining. The depression in trade
rienced during the past few years had, therefore, the effect of
ly increasing the number of seekers after gold, many of the
ployed being supplied by the Government with miners' rights
with railway passes to take them to likely spots where a living
be made by fossicking, on condition that the cost should be
wards refunded when the men were in a position to pay the money.
rge number of applications have been made by the relatives and
s of these men for assistance to join their friends, showing that, at
rate, many of those originally sent fossicking have found sufficient
cement to remain on the fields. And it would benefit both the
idual and the State if a larger number of the labouring population
e colony were to take advantage of the liberal laws under which
older of a miner's right may take up a residence area, in addition
claim, on the gold-fields.

other directions much enterprise has been shown during the last
years in the search for gold, and quartz reefs have been opened up
any parts with profitable results. Old workings, which had been
doned years before, under an impression that they were valuable
on the surface, and which had scarcely, in any instance, been tested
greater depth than 200 feet, have been reopened with encouraging
lts, and quartz-mining is becoming more and more a permanent
stry, the yield from that source being now almost four times as
l as it was seven years ago. And in connection with quartz-mining,
noteworthy that the deepest mine in New South Wales is only a
e over 1,000 feet down, while in Victoria payable stone is being
d from six mines over 3,000 feet in depth, and from six others over
feet deep. This state of things the Government of the colony
to remedy, and, with the object of encouraging mine-owners to
the reefs and alluvial deposits at greater depths than are now
d, have offered a reward of £2,000 for the discovery of payable
or alluvial at a depth of 1,500 feet, the amount to be increased
000 when a depth of 2,000 feet is reached.

number of men employed in alluvial and in quartz-mining
the last ten years, with the production from each branch of the
ry, is set down below. Steady and rapid progress in the employ-
afforded in quartz-mining may be traced from 1892 onward;
vial mining the progress has also been decided, but in this
of the industry the number of men engaged is liable to fluctuate
ccessions to and withdrawals from the ranks of the fossickers,
ng to the state of the labour market. All the men employed in
mining are Europeans, but on alluvial fields 1,002 Chinese found

occupation in 1897. This represents an increase of 292 on the of Chinese returned in 1896, and it is evident that the fall in th of tin caused a large number of these aliens to transfer their to gold-mining :—

Year.	Number of Miners.		Production.	
	Alluvial.	Quartz.	Alluvial.	Quartz.
	No.	No.	oz.	oz.
1888	4,368	3,910	43,905	43,598
1889	5,623	4,569	39,412	80,347
1890	6,304	6,285	63,879	63,881
1891	4,748	6,418	50,713	102,623
1892	4,030	5,019	35,024	121,846
1893	6,401	5,556	55,336	123,952
1894	8,742	8,465	93,742	231,045
1895	11,331	10,103	81,645	278,520
1896	10,138	12,069	77,290	218,782
1897	9,030	12,256	72,615	219,602

The principal seats of alluvial gold-mining are the Bathur Mudgee districts, and the country watered by the various of the Upper Lachlan, and also in the Tumut and Adelon Braidwood districts. In 1880, the Temora gold-fields, in the rumbidgee district, about 30 to 40 miles from the inland to Wagga Wagga, were discovered, and were for some years flourishing condition. The district is now drifting from minin an important agricultural settlement. In the north of the in the New England district; on the coast, in the county of cester, and in the extreme north-west, at Mount Poole, Browne, and Tibooburra, the gold fields maintain a consid population of miners. Hydraulic sluicing is adopted in several in the New England district. At Uralla Creek, the Brown's Pa Gold Mines Company has lately put into operation a novel and system of mining in alluvial. This creek has for years past bee depository of the tailings from the old Sydney Flat diggings, which filled the creek several feet above the original level; in addition, is below the sediment an alluvial deposit from 10 to 20 feet in thi on the bed rock. To mine this profitably, the whole of the has to be removed and washed; and to provide for the proper ca out of these operations, a system of dredging and hydraulic combined has been adopted, the machinery employed being capa raising [illegible] yards of stuff and [illegible] gallons of water pe Hydraulic sluicing is also carried on at Kiandra, on the tablelands, where extensive reservoirs have been formed, and the the rocks [illegible] worked [illegible] various places [illegible] Tumbarumba, wh Tumbarumba [illegible] The Sluicing Company is introducing more p pumping machinery. Near Wagga Wagga, in the southern mining d ments are being made for hydraulic sluicing on a large scale in ion with alluvial leases at Makin's Creek.

following table shows the average yield during 1897 from several mines where the quantity of stuff treated is ascertainable:—

District.	Quantity.	Average per ton.			Yield of Gold.		
	tons.	oz.	dwt.	gr.	oz.	dwt.	gr.
Bathurst	5,534	0	11	6	3,112	17	12
Lachlan	9,552	0	2	18	1,314	0	0
Tumut and Adelong ...	122,460	0	0	8	2,041	0	0
Southern	4,000	0	5	0	1,000	0	0
Mudgee	1,984	0	2	12	248	0	0
Peel and Uralla ...	2,000	0	0	7	29	3	8
Total	145,530	0	1	1·5	7,745	0	20

principal quartz-veins worked in the colony are situated near ng, Armidale, Bathurst, Hill End, Orange, Parkes, and Wyalong. stricts which produced the largest quantities of gold during 1897 -Wyalong and Wyalong West, 34,370 oz.; Hillgrove, 31,886 oz. rove, 21,556 oz., Hillgrove West—now known as Metz—10,330 bar, 26,211 oz.; Adelong, 19,691 oz.; Orange (chiefly Lucknow), 4 oz.; Nana Creek, 11,234 oz.; Wellington (chiefly Mitchell's), 9,284 oz.; Parkes, 9,052 oz.; Gulgong, 6,000 oz.; Fairfield and ville, 5,535 oz.; Barmedman, 4,693 oz.; Sunny Corner, 4,169 oz.; , 4,086 oz.; Hill End, 3,777 oz.; Broken Hill (saved by the Hill Proprietary Company from their silver lead bullion), 3,775 ndagai, 3,439 oz.; Temora, 3,420 oz.; and Peak Hill, 3,320 oz the Mount Drysdale gold-field, in the Cobar district, discovered the most important find of recent years was made at Wyalong, in Lachlan district, where the largest amount of gold won in 1897 tained. The first prospecting claim on this field was registered 26th December, 1893; a great rush at once ensued, and in ly part of 1894 there were probably more than 10,000 persons ground, but this number has now been reduced to 2,400. In he production from the field exceeded that derived from the ove district by 2,484 oz., and Wyalong may now be said to hold the r position among the gold-fields of the colony. In output it was ntly only a few hundred ounces ahead of the Hillgrove field in but its reported yield for that year—34,370 oz., valued at 80—was, without doubt, under-estimated, for the returns of the works were possibly not quite exact, and there was a large ty of gold sent direct to Melbourne, where mint charges are not as in Sydney, and a better price is obtained. This quantity obtainable by the Department of Mines; but up to 1897 it was cluded in the official gold yield, and it is possible that the quantities for previous years will be afterwards adjusted. affords employment to a much larger number of men than I but many of these have been employed in work of developm which no immediate returns can be expected. Extensive chl and cyanide works have been erected for the treatment of the ore found below the water level; and it is estimated that th the machinery on the field is £80,000.

The following table shows the average yield of gold obtai certain parcels of quartz crushed in several of the mining during 1897:—

District.	Quantity.	Average per ton.			Yield of Go	
	tons.	oz.	dwt.	gr.	oz.	dw
Bathurst	17,655	0	17	8	15,323	1
Tambaroora and Turon	5,500	0	14	3	3,890	
Lachlan	44,997	1	1	7	47,957	
Southern	15,500	0	8	21	6,895	1
Tumut and Adelong	13,468	0	17	6	11,615	1
Peel and Uralla	48,235	0	14	16	35,421	1
Hunter and Macleay	1,740	0	11	13	1,009	1
Clarence and Richmond	11,200	1	3	4	12,980	1
Mudgee	24,761	0	13	0	16,142	1
Cobar	1,750	0	5	3	450	
New England	4,865	0	18	11	4,500	
Total	189,671	0	16	11	156,186	

The gold found in New South Wales is never absolutely pu containing traces of other metals, such as copper, iron, and bis often a fair percentage of silver. To the presence of silver yellow colour is due. New South Wales gold is generally colour than Victorian gold, but is of a deeper yellow than t in the fields of Southern Queensland. Its specific gravity about 17·5

The average weight of the metal obtained by each mine was 13·73 oz., valued at £51 2s. 8d. It must not be supposed, that these men were employed during the whole year for a

Many of the miners follow other pursuits during a portion of ar; besides this, there were several new fields which so far ielded very small returns, and a large number of men were d in prospecting. For the past ten years the average quantity of on per miner has been 14·43 oz., valued at £52 9s.

steam engines employed in quartz-mining in 1897 numbered 308, n aggregate of 5,457 horse-power. There were also 233 crushing-ines, and 2,101 stamp-heads. In alluvial gold and tin mining were employed 31 steam engines, of which the aggregate horse-r equalled 407. The value of the machinery employed in gold-g is estimated at £697,028.

e number of fatal accidents in gold-mines during 1897 was 15— less than in the previous year. Seven men lost their lives in rous quartz-mining, and eight in alluvial workings; while nine were ly injured in quartz-mines, and four in alluvial mines; and nine with slight accidents in quartz-mines.

om the date of the first discovery of payable gold, in 1851, to the f the year 1897, the quantity of gold produced in the Australasian ies represents a total value of £399,381,186, extracted in the short of forty-six years. The share of each colony in the production is wealth is given below:—

Colony.	Value.	Proportion raised in each Colony.
	£	per cent.
New South Wales	44,488,371	11·14
Victoria	247,389,792	61·94
Queensland	41,749,606	10·45
South Australia	2,038,603	0·51
Western Australia	6,669,018	1·67
Tasmania	3,673,162	0·92
New Zealand	53,372,634	13·37
Australasia	399,381,186	100·00

far the largest proportion of this amount was produced by the of Victoria—amounting, in fact, to more than three-fifths of the . New Zealand is the next largest producer, New South Wales coming third. For the ten years ended 1897, the world's produ gold is estimated as follows:—

Year.	Value.	Year.	Value.
	£		£
1888	22,139,000	1893	31,110,000
1889	24,699,000	1894	38,085,000
1890	23,780,000	1895	41,413,000
1891	26,130,000	1896	44,077,000
1892	29,260,000	1897	49,428,000

Of the total value for 1897, the Australasian colonies produce 21·9 per cent., and New South Wales alone, 2·2 per cent.

SILVER.

Up to the year 1882 the quantity of silver raised in New Wales was very small, but in that and following years e discoveries of this metal, associated principally with lead and ores, were made in various parts of the colony, notably at B in the New England district, and, later on, at Sunny Corne Bathurst, and at Silverton, Broken Hill, and other places on the Range.

The argentiferous lead ores of the Barrier Ranges and Brok districts of New South Wales have, more than any other, at attention. This rich silver-field, which was discovered in 1883 by Rasp, a boundary rider on Mount Gipps Run, extends over 2,500 miles of country, and has developed into one of the principal centres of the world. It is situated beyond the river Darling, the confines of the neighbouring colony of South Australia. Barrier Range district the lodes occur in Silurian metamorphic mi schists and banded gneisses, intruded by granite, porphyry, and and traversed by numerous quartz reefs, some of which are gold- The Broken Hill lode is the largest as yet discovered. It varies i from 10 feet to 200 feet, and may be traced for several miles, the having been taken up all along the line of the lode, and sub into numerous leases, held by mining companies and syndicates.

The Broken Hill Proprietary Company hold the premier p They have at Port Pirie, in the neighbouring colony of South A a complete smelting plant on the latest and most approved pri and have enlisted the services of competent managers, whose ex has been gained in the celebrated silver-mining centres of the States. From the commencement of mining operations in 1883 end of May, 1898, the Company treated 3,699,358 tons of sil silver-lead ores, producing 93,648,837 oz. of silver and 352,780 lead, valued in the London market at £19,526,518. They h ds and bonuses to the amount of £6,704,000, besides the nominal of shares from the several "Blocks." The sum spent in the erec- nd construction of plant, from the opening of the property, has about £890,000. The mine wages and salary sheet for the last months was £344,217, including £55,882 paid to contractors £48,188 for quarrying. The balance of £240,147 was made up of wages £63,303; smelters' wages, £79,098; lixiviation, chloridis- concentration, roasting, and refinery wages, £93,902; and electric and machine-shop wages, £3,844. The net profit for the year £251,000. Besides the mines at Broken Hill, there are workings lverton and Thackaringa in the same district. The total value of rals exported from the Barrier district during 1897 was £1,757,752, buted as follows:—Silver-lead bullion, 16,938 tons, £621,745; sil- ad ore, 270,372 tons, £1,028,228; silver ingots, 1,800 oz., £225; r ore, 158 tons, £781; copper matte, 2,667 tons, £106,698; and r ingots, 30 cwt., £75. The quantity of pure silver contained in ms enumerated amounted to about 9,932,000 oz.

natural consequence of the success of the Broken Hill mines, num- of miners were attracted to the district, and the population, which in consisted of only a few station hands, had risen at the date of the census to a total of 24,438 souls, of whom 6,465 men were employed about the mines; and the population of the district is still estimated r 20,000. The aggregate output of the mines, including the Pro- ary, to the end of 1897, was valued at £22,947,417; and the value machinery in the Barrier district at the end of the year was ,350. This is much less than the values previously set down, the tion being chiefly due to the removal of machinery to Port Pirie, re the smelting operations of the Proprietary Company are now ly carried out. The proximity of Silverton and the Barrier district colony of South Australia could not fail to attract the attention business people at Adelaide, who were not slow to realise the ntages which they would obtain by attracting towards their capital traffic of a region of such immense wealth. The railway system of h Australia was immediately extended to the border, and in the y of New South Wales a tramway was laid down, thus connecting own of Silverton and the mines of Broken Hill with the railway to aide and Port Pirie, in the latter instance reducing the land car- by some 70 to 80 miles.

ompany was lately formed in London for the purpose of acquiring ights in New South Wales of a new process for the treatment lphide ores. Works have been constructed at Dapto, near Lake rra, and refractory gold ores as well as silver ores are now being d. The machinery is capable of treating 200,000 tons yearly. er company has erected at Cockle Creek, near Newcastle, electro- urgical works, which are giving employment to a large number , and where experiments with the sulphide ores are also being three years ended May, 1896, and to 16·90 oz. of silver and 1·21 c lead during the two years ended May, 1898 :—

Period.	Results per ton of Ore.		Cost of raising and treating 1 ton of ore.
	Silver.	Lead.	
	oz.	cwt.	£
June, 1888, to May, 1891..	37·56	3·21	4·05
June, 1891, to May, 1893...	30·13	2·39	3·41
June, 1893, to May, 1896...	21·98	1·51	2·35
June, 1896, to May, 1898...	16·90	1·21	2·29

The number of miners engaged in silver and silver-lead mines in was 6,204, and the average value of mineral won, per miner eng was £273 14s. 8d. A comparison with the figures of the previous years is afforded by the following table :—

Year.	Miners.	Value of Silver and Lead won.	
		Total.	Per Miner.
	No.	£	£ s. d.
1888	2,986	1,142,405	382 11 9
1889	6,587	1,971,198	299 5 1
1890	5,806	2,762,554	475 16 2
1891	7,645	3,619,589	473 9 2
1892	5,889	2,477,836	420 15 2
1893	4,709	3,031,720	643 16 3
1894	4,208	2,289,489	544 0 2
1895	4,658	1,642,671	352 13 1
1896	5,555	1,785,451	321 8 3
1897	6,204	1,698,239	273 14 8

The total number of accidents which took place in the silver-min the colony in 1897 was 61, 14 persons losing their lives, 26 suff severe injuries, and 21 meeting with slight injuries. These figure comparatively high. In the course of the year, mining in the A district was responsible for serious loss of life, especially in the part of June, when five fatalities were recorded in quick succes As the result of a Government inquiry into the cause of these s accidents, it was stated that the incompetency of men who had r sented themselves as miners, and who had no real knowledge o work, had contributed not a little to their occurrence, and it found that the men were working under competent officers. In years the casualties form but a very small proportion of the p engaged in silver mining, while the elements of danger are grea st be taken as reflecting considerable credit on the management ines.

world's production of silver during the ten years ended 1897 ated as follows :—

Year.	Ounces.	Year.	Ounces.
1888	108,827,000	1893	162,162,000
1889	120,214,000	1894	178,668,000
1890	126,095,000	1895	182,220,000
1891	137,171,000	1896	176,707,000
1892	152,940,000	1897	179,291,000

annual output of New South Wales is about one-eleventh of tal production of silver.

TIN.

le tin occurs principally in the granite, and stream tin under the ic, country in the extreme north of the colony—at Tenterfield, ville, Tingha, and in other districts of New England. The has also been discovered in the Barrier District, at Poolamacca ariowie ; near Bombala, in the Monaro district ; at Gundle, near ey ; at Jingellic, on the Upper Murray ; at Dora Dora, on the Murray ; and in the valley of the Lachlan ; but in none of these ts has it been worked to any extent. Although the first discovery ade by the Rev. W. B. Clarke as far back as 1853, the opening of ds in the colony did not take place until the year 1872. The value duction since that date has been as follows :—

Year.	Value.	Year.	Value.
	£		£
1872 to 1876	1,032,483	1888	309,510
1877	248,906	1889	207,670
1878	214,613	1890	179,057
1879	256,732	1891	133,963
1880	354,252	1892	152,994
1881	568,795	1893	126,114
1882	541,413	1894	85,264
1883	448,887	1895	87,937
1884	281,188	1896	68,546
1885	308,760	1897	49,900
1886	277,545		
1887	311,889	Total	6,246,418

It will be seen that tin has contributed in a very considerable
to the general development of the natural wealth of the colony,
point of value its aggregate production stands in the fourth plac
to gold, coal, and silver. From the opening of the fields the pro
increased rapidly down to 1881, when in value it exceeded the
of gold for the year, and was but slightly behind coal. In 1
production was valued at £541,413, being only £27,000 less than i
but after that year, owing to protracted dry seasons, which in
cases prevented mining operations, combined with the compar
low price which the metal brought, the value of the output f
siderably, and in 1897 only represented the small sum of £
During the ten years from 1888 to 1898 the metal was subjec
almost continuous fall in value, only realising in 1898 one-half th
that was obtained ten years before. The metal, however, has no
a great jump in price, the London quotations in January, 1899
£98 per ton as compared with £63 in 1898 and £59 in 1897.

Another cause of diminished production in the colony is t
shallow deposits of stream-tin have to a great extent been exh
The deep deposits and the tin-lodes, however, have as yet scarce
touched, nearly all the metal hitherto produced having been take
alluvial deposits. After careful surveys Professor David has sta
belief that numbers of deep channels or leads, covered over by
are still lying undisturbed; and the future of the industry in the
with the improvement in the price of the metal, may be ho
regarded. The principal lodes worked during 1897 were the Ve
Creek Tin-field, near Emmaville: at Tent Hill; at the Mann
near Glen Innes; at Wilson's Downfall; and at Tingha. Wit
twenty-six years that have elapsed since the opening of the ti
the value of the net export, which is taken as the production, h
£6,246,418.

In the alluvial tin-fields of Tingha and Emmaville, the nu
Chinese engaged in this industry has in some years greatly e
the Europeans. In 1897, however, the Chinese at Emmavill
bered only 170, whilst the Europeans working alluvial tin-dri
tin-lodes numbered 100. The total number of miners employed
mining in the colony was 1,297, viz., 919 Europeans and 378 C
nearly all of whom were employed in the Northern Districts.
one fatality was recorded in tin mines during the year. This o
at Tingha through a fall of earth.

COPPER.

The principal deposits of this mineral are found in the
part of the colony, between the Macquarie, Bogan, and
Rivers. Deposits have also been found in the New England and S
districts, as well as at Broken Hill, showing that the mineral i
distributed throughout the colony. The copper-mining industry

me was of considerable importance, reached its highest point ction in 1883, when the output was valued at £472,982. From r, however, the industry rapidly declined, in consequence of the ll in the price of the metal; indeed, the very low figure reached l many from embarking in operations which showed every of success, some of the mines which had been worked for ears were closed, and in 1894 the production was only valued at 7. The principal difficulty, common to other branches of the industry, lay in the great distance of some of the chief mines from the port of shipment, and the consequently heavy land carriage. The year 1894, however, saw the lowest point ression in the copper market. Prices have steadily risen during t four years, and copper-mining in the Australasian colonies is ogressing satisfactorily, the production in New South Wales in eing the highest recorded since 1884. The copper-lodes of New Wales contain ores of a very much higher percentage than f many well-known mines worked at a profit in other parts of rld, and, with a fair price, should return satisfactory results. which could not be profitably worked a few years ago have been ed; and a considerable amount of capital has been expended in ction of new machinery. The net export of copper, which is taken production of the colony, is shown below from the year 1859:—

Year.	Value.	Year.	Value.
	£		£
1859 to 1876	408,071	1888	247,304
1877	127,396	1889	122,444
1878	209,030	1890	84,107
1879	210,623	1891	119,195
1880	268,700	1892	114,559
1881	257,884	1893	73,287
1882	182,473	1894	63,617
1883	472,982	1895	136,969
1884	362,287	1896	197,814
1885	170,993	1897	283,174
1886	122,990		
1887	115,444	Total......	4,351,343

nore important mines are those of Cobar, where the Great Cobar hich recommenced work early in 1894, raised in the following .845 tons of ore, yielding 1,703 tons of smelted copper; in 6,431 tons of ore, yielding 2,650 tons of smelted copper, valued ,200; and, in 1897, 64,820 tons of ore, yielding 2,462 tons of copper, valued at £108,306. It may be mentioned that the extracted from this mine is found to contain gold more than it to pay for mining and treating the ore. The syndicate to he mines belong now give employment to 450 men. In 1897 the se Copper-mine, which has been acquired by the Great Cobar

Syndicate, smelted 16,863 tons of ore, yielding 543 tons o
copper, valued at £24,435. The Burraga Company produc
tons of ore, yielding 727 tons of refined copper, valued at
150 men find constant employment at their mines. The pr
of the Mount Hope Copper Company was 734 tons of ore,
110 tons of refined copper, valued at £5,340; while at Sout
Hope another company raised 1,200 tons of ore, the refine
obtained amounting to 110 tons, valued at £4,500. The Gir
Copper-mining Company employ about 200 men, and hav
complete plant. During the year, 17,154 tons of ore were r
copper contents being 733 tons. Refining has been commence
company, so far 173 tons of almost pure copper having been p
In other districts considerable activity is also being displayed.
be mentioned that the Broken Hill Proprietary Company save
to the value of £56,880 in the course of their operations du
year.

The total number of miners engaged in copper-mining in
1,710. As showing the revival in the industry, it may be m
that the number of men finding employment in 1896 was only
1895, 868; in 1894, 645; and in 1893 the small number of 283
were two fatal accidents recorded in copper mines in 1897; tw
met with serious accidents, and six others suffered slight injuri

IRON.

Iron is widely diffused throughout the colony, and occurs p
in the form of magnetite, brown hematite or goethite, limo
bog-iron. Deposits of chrome iron are also found. Magnet
richest of all the iron ores, sometimes containing a little ov
cent. of available metallic iron, though it is not often found
this very high percentage. These ores are widely distributed th
New South Wales. The results of a number of analyses m
deposits at Brown's Creek, in the county of Bathurst, and at
wang, where veins were opened out a few years ago, show
samples of ore yielded from 40·89 to 56·85 per cent. of meta
At Wallerawang, a variety of garnet, containing a large perc
metal, occurs in conjunction with the ore in the veins, which is
as "extremely well adapted for reduction in the blast furnace."
hematite or goethite occurs in very extensive deposits in
Mountain Ranges, the principal centres so far explored being
at Mittagong, Picton, Berrima, Lithgow Valley, Wallerawa
Rylstone and Mudgee Districts, and in the vicinity of Port
The result of a number of analyses of this kind of ore denote
very rich in metallic iron, containing a proportion of 42·69 to
cent., and in the majority of cases over 55 per cent. of
sample of hematite from the Maitland district contained

f metallic iron. A sample of brown hematite from Mount it, near Wollongong, analysed during 1891, gave 54·28 per cent. L. The value of these deposits is enhanced by their almost ble occurrence in proximity to limestone and coal-beds. It is ate, also, that the main lines of railway pass through the regions the deposits are most easily worked.

iron ore deposits of Seaham and Clarence Town, in the Williams district, received some attention during 1897. These deposits ocally supposed to contain considerable quantities of titanium, ing a most objectionable acid from a smelting point of view. the object of testing the ore, samples were taken as far as possible rom one another, and on being assayed separately, the results gave 12 to 49 per cent. of metallic iron, and yielded no appreciable ty of titanic acid. Nothing has yet been done to discover the of the beds, and subsequent investigation may show that valuable ts of magnetic iron ore occur in this district.

onite—a variety of brown hematite—principally occurs at Lithgow, nk, and Bowenfels, in the Blue Mountains; in several parts of the r River coal-field; and at Bulli, in the Illawarra District. This usually found very rich in metal, and contains an average of over cent. of iron; while the English clay bands, which are mostly ates, only contain about 30 per cent. of metallic substance. It in lenticular layers of no great extent, in the Coal Measures. on-ore, which is impure limonite, is principally found at Mittaand assays of this ore gave an average percentage of metal of han 45 per cent.

e of the other southern provinces possesses deposits of iron-ore aping in extent or richness those of New South Wales. It is therefore le that at some future time this colony will become the great seat iron industry of Australia. As illustrating the present extent supply required, the following table, showing the value of all tions of iron, machinery, and iron manufactures imported into ious colonies during the five years, 1893–97, has been compiled:—

olony.	1893.	1894.	1895.	1896.	1897.	Average Yearly Import, 1893–97.
	£	£	£	£	£	£
uth Wales	1,531,639	1,189,249	1,219,096	1,957,143	2,398,701	1,659,206
a	715,271	699,696	665,148	1,194,976	1,543,527	963,723
and	363,624	496,029	691,215	848,871	938,579	667,664
ustralia ..	405,214	349,945	349,826	536,632	639,174	456,158
n Australia	354,759	355,890	587,063	1,052,135	1,305,772	731,124
ia	153,771	104,969	117,946	155,813	409,732	188,446
aland.........	920,626	836,589	781,602	1,095,206	1,477,532	1,022,311
stralasia ...	4,445,104	4,032,367	4,411,896	6,840,776	8,713,017	5,688,632

the market is uncertain. Only 3 tons were shipped to London : It is stated that in the Nymagee district promising indications of deposits have been found, but no steps have been taken to op up. Rich argentiferous ores have been obtained in the great silver-mine, the lodes consisting of soft granular felspar matrix, nated with blotches of bismuth, molybdenum, and chloride o The largest mass of native bismuth yet discovered in the colony nearly 30 lb., and was obtained in the Kingsgate mine. The this metal exported up to the end of 1897 was £39,012.

PLATINUM.

Platinum and the allied compound metal Iridosmine have be in New South Wales, but so far in inconsiderable quantities, t occurring commonly with gold or tin in alluvial drifts. It is that the beach deposits at Ballina and other places on the coast might, with improved appliances, be profitably worked for p Fifteen cwt. of sand from this district were forwarded in platinum merchants in London for treatment. The tests made however, that the small percentage of metal found and the cost of tion barely leave a margin of profit. On the northern beaches, platinum is being obtained by the miners who are working th sand for gold. The metal has also been discovered at Fifield, Parkes district, and in lodes near Broken Hill and Orange. operations were confined in 1897 to the Fifield goldfield, wh metal is found associated with the gold in washdirt. The tot of platinum for the year was 1,966 oz., as compared with 2,90 1896. Mining on this field is handicapped by a scarcity of wat only half-time is put in at the claims. The Fifield platinum o coarse shotty grains, and is much purer than that obtained fr northern beach-sands. The quantity of platinum produced duri was valued at £2,949.

CHROMIUM.

Chromium is found in the northern portion of New South in the Clarence and Tamworth districts, and also near Gundaga usually associated with serpentine. The chrome mining indu very recent date, although an attempt was made in 1882 to deposits at Bowling Alley Point, in the Peel River district; 1891 and 1895 in the Clarence River district. The first mining operations were carried out near Coolac, in the G district, 2,000 tons of ore being despatched in 1894 and 18 although numerous discoveries of chromite followed, the G Tumut district has remained the only scene of profitable mini prise. The exports of chrome ore in 1894, 1895, and 1896

6, the Australian Agricultural Society obtained a grant of acres of land, together with the sole right, conferred by f working the coal-seams which were known to exist in the e district. Several mines were opened up, and profitably or a number of years; but it was not until the expiration, in the monopoly enjoyed by the company that the coal-mining showed signs of extensive development. During the year he output of coal only reached the total of 40,732 tons, of the £13,750. Six years afterwards the production had been and the output of this mineral has rapidly increased year by il coal-mining is now one of the staple industries of the colony, luction for the year 1897 amounting to 4,383,591 tons, t £1,230,041. This quantity is the highest recorded as the utput, but owing to the steady fall in the price of coal, the much less than that of the smaller production of the years . The total production to the end of the year 1897 is 76,665,857 ued at £33,049,372. Newcastle, the centre of the coal trade, arly well fitted by situation to become the port of supply for untries of the southern seas. Every week coal-laden vessels wharves, not only for the Australian colonies, but for China, e Pacific Slope of North and South America, Mauritius, the Good Hope, and other lands. Every provision has been made Government for shipping coal, and over two miles of wharves, with cranes and shoots capable of loading over 28,000 tons line its shores. The markets of the colonies are likewise supth quantities of excellent coal from the seams worked in the district, and the product of the southern collieries is also in large quantities.

umber of coal-mines under inspection in New South Wales at of the year 1897 was 87. They gave employment to 9,626 of whom 7,831 were employed under ground, and 1,795 above The average quantity of coal extracted per miner was 560 against an average of 519 tons for the previous year, and for 1895. The low average for 1890, shown below as only s, is accounted for by the strike that occurred during that it a tendency to decline had been exhibited since 1882 when age per miner was 578 tons. During the last three years, , the miners have been able to work better time, and the production per man has greatly increased, as the comparison

will be found the quantity of coal raised in the colony, and ber of coal-miners employed, during each of the last ten years. ed on the total value of the coal produced during the decade, age quantity of 460 tons extracted yearly by each person underground represents a value of £167 4s. 9d., and for the nber of persons employed, £136 6s. 8d. In 1897 the average production was £156 6s. 8d. for each person employed under-

The average yearly import for the five years covered by t statement amounts to £1,659,206 for New South Wales, and £5 for Australasia; and the quantity of pig-iron required to pro material represented by these values is approximately 120, and 411,000 tons per annum for New South Wales and the wh of colonies respectively. In a report, dated January, 1891, by Mr. C. S. Wilkinson, Government Geologist, it was stated that deposits in the districts of Mittagong, Wallerawang, and Ryls tained in sight 12,944,000 tons of ore, estimated to yield 5,853, of metallic iron, but such estimates as these are the rou approximations. These districts are most favourably situated establishment of smelting works. Some years ago public att England was drawn to the possibility of manufacturing iro the colony, and a mining expert was sent out from that co inspect the iron, lime, and coal deposits, and to report upon the cost of establishing the industry in the colony, but the visit wa result. In 1897 it seemed as if the project for establishing the manufacture of iron would take practical shape, and neg for the promotion of a company in England were well und when they were interrupted by the death of the prime move still hoped that some practical result will follow; but, in any foundation of the industry is a mere matter of time, for the facilities of New South Wales for the manufacture of iron a passed.

Works for the manufacture of iron from the ore were estab Eskbank, near Lithgow, where red siliceous ore, averaging 22 and brown hematite, yielding 50 per cent. metallic iron, were fully treated. Abundance of coal and limestone are foun neighbourhood. This establishment, however, has for some ti doned the manufacture of pig-iron, for which it was origina The work now carried on consists of the re-rolling of old rails, manufacture of iron bars, rods, and nails, and of ordinary The quantity manufactured from scrap during 1897 was 3,2 valued at £21,862. A successful attempt has been made at M to make gas-pipes, etc., from iron smelted from the ore, and tak to the mould, without first making it into pig-iron. Some iron smelting works were also established at Fitzroy, Mittag after producing a considerable quantity of pig-iron the operati discontinued. Some samples of ore, coal, and limestone obt this district, with pig-iron and castings manufactured therefr exhibited at the late Mining Exhibition in London, and obtain award. Large quantities of ironstone are being sent from Orange, Newbridge, and Blayney to the Illawarra works to b flux, the gold contents of the ore helping to defray the ext railway carriage.

During the year 1893, Parliament agreed to a resolutio manufacture of 30,000 tons of iron piping in the colony, and

88, when the production was interfered with by strikes; both mber of men employed and the quantity of coal raised have lled since. The output in 1897, however, was higher than in any us year, exceeding that in 1891 by 323,617 tons:—

Year.	Persons employed in and about mines.	Persons employed under-ground.	Quantity of Coal raised.		
			Total.	Per person employed in and about mines.	Per person employed under-ground.
	No.	No.	tons.	tons.	tons.
1888	6,873	5,736	2,067,042	300	360
1889	7,559	6,216	2,624,347	347	422
1890	7,874	6,345	2,120,046	269	334
1891	8,309	6,732	2,853,252	343	424
1892	8,204	6,783	2,611,732	318	385
1893	7,872	6,503	2,203,480	280	339
1894	7,077	5,773	2,605,143	368	451
1895	6,777	5,605	2,631,222	388	469
1896	6,941	5,697	2,623,016	378	460
1897	7,229	5,925	3,176,869	439	536

thern District.—In the Southern District there were in 1897 collieries under official inspection, giving employment to 1,984 ns, of whom 1,562 were at work underground. These numbers it an increase of 90 persons employed in and about the mines, and underground workers, as compared with those so engaged in 1896. was, however, a decrease of 89,515 tons in the production, the quantity raised during the year being 918,862 tons, valued at 558. The largest output known in one year in the district was in when 1,008,377 tons were obtained, the next highest figures being for 1892, when 932,873 tons were raised. Much as the trade of uth has grown, owing to the demand for southern coal for steam ses, no attempt has hitherto been made to overcome the difficulty ding. To meet the claims of this district, the Government, ds the end of 1898, brought forward a proposal to create a harbour rt Kembla, a few miles south of Wollongong, by constructing, in st instance, a breakwater. There are already two jetties from coal is shipped, but they are exposed to the full force of the south-ly and easterly gales that constantly sweep up the coast, and for me being the shipment of cargo has to be abandoned. With the breakwater, it is believed that there will be complete protecti shipping, and vessels will be in a position to load at all times.

The history of coal production in this district for the last te may be gathered from the following table:—

Year.	Persons employed in and about mines.	Persons employed underground.	Quantity of Coal raised.		
			Total.	Per person employed in and about mines.	Per person employed underground.
	No.	No.	tons.	tons.	tons.
1888	1,676	1,244	796,806	475	640
1889	2,065	1,598	701,572	339	439
1890	1,959	1,434	597,598	305	417
1891	2,007	1,550	837,873	417	541
1892	1,860	1,469	932,873	502	635
1893	1,851	1,503	884,470	478	588
1894	1,755	1,443	867,064	494	601
1895	1,949	1,586	916,503	470	578
1896	1,894	1,506	1,008,377	532	670
1897	1,984	1,562	918,862	463	588

Western District.—In the Western District in 1897 there w collieries under official inspection, giving employment to 413 pers whom 341 were at work underground. From the subsequent t will be seen that the output in 1891 was in excess of that of an year during the decade, not even excepting 1888, when the dema Western coal was larger than usual, owing to the scarcity caused strike in the Northern Collieries. The figures for 1897 show an i of 9,736 tons compared with those of the previous year, and highest since 1891. The average quantity of coal raised per mi much greater in the Western collieries than elsewhere in the This is due to a variety of causes, but chiefly to the greater thick the seams and the more friable character of the coal, and to the c stance that the coal-beds are almost horizontal, and generally at depths; in some cases the coal is worked by means of adits or t instead of shafts, so that the facility for winning coal is much in these mines than in those at Newcastle. But though the is greater per miner than in the other coal regions, the price for is lower, so that the earnings of the individual miner do not greatly wherever the mine is situated.

The following table shows the growth of coal production Western region during the last ten years. Until 1891 the progr regular, and in keeping with the advance of settlement in the por the colony extending from the Blue Mountains to the Darling, in the Western collieries have a monopoly of the coal trade; bu 1891 to 1895 the output decreased, a considerable improvemen ever, being manifested in 1896 and 1897. Situated, as these mi roximity to the principal iron-fields of New South Wales, e prospects will be greatly improved should the manufacture m the ore become an established industry in this part of the

ar.	Persons employed in and about mines.	Persons employed underground.	Quantity of Coal raised.		
			Total.	Per person employed in and about mines.	Per person employed underground.
	No.	No.	tons.	tons.	tons.
38	752	642	339,594	451	529
39	653	535	329,713	505	616
90	636	532	343,232	540	645
91	504	436	346,804	688	795
92	450	372	236,363	525	635
93	305	261	190,378	624	729
94	299	245	199,869	668	816
95	296	247	190,864	645	773
96	398	335	278,124	699	830
97	413	344	287,860	697	837

llowing table shows the average price of coal per ton in the districts for the last quinquennial period ; the average for uth Wales makes allowance for the quantity raised in each —

District.	1893.	1894.	1895.	1896.	1897.
	s. d.	s. d.	s. d.	s. d.	s. d.
....	7 11	6 9	6 2	6 1	5 11
....	5 7	5 3	5 3	5 3	5 1
....	4 6	4 7	4 3	4 1	4 1
New South Wales............	7 2	6 4	5 10	5 9	5 7

were 16 persons killed and 63 injured in the New South Wales es during 1897, making a total of 79 persons affected by accidents—the number of cases terminating fatally being six in the previous year. The non-fatal cases were more numer in any year since 1892, when the number was 77. For the period ended 1896—the latest data available—the average loss of life in the British coal-mines was 1·63 per thousand, rate of 173,947 tons of coal raised for every fatal accident. New South Wales collieries, for the ten years ended 1897, the n 1·71 fatal accidents per thousand miners employed, and 218,577 coal were raised for every life lost. The number of accidents coal-mines of the colony, with the proportion of miners to ea and non-fatal case, is given herewith, as well as the quantity raised to each life lost :—

Year.	Accidents.		Number of miners employed to each person.		Number of tons of coal raised to each person.	
	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.
1888	43	15	216	620	74,500	213,5
1889	57	41	180	251	64,134	89,1
1890	36	13	291	805	85,024	235,4
1891	54	21	200	515	74,776	192,2
1892	77	8	136	1,318	49,103	472,6
1893	45	13	222	771	72,851	252,17
1894	40	7	228	1,304	91,802	524,5
1895	47	10	192	902	79,544	373,8
1896	62	24	149	385	63,057	162,8
1897	63	16	153	601	69,581	273,9

It is proposed to establish a miners' accident fund in the to which contributions will be made by the Government, th masters, and the men employed. The annual average num fatalities in the coal-mines of the world for the last ten years seen from the following table :—

Country.	Average Annual Number of—		Mortality pe 1,000 Employ
	Persons Employed.	Lives Lost.	
United Kingdom	642,249	1,048	1·63
United States	318,171	808	2·54
Prussia	243,593	623	2·56
France	122,033	189	1·55
Austria	87,784	189	2·16
Belgium	113,910	191	1·68
Nova Scotia	5,415	20	3·69
New South Wales	9,842	17	1·71

llowing table shows the quantity and value of coal raised in uth Wales from the earliest record to the close of 1897, the oduction being 76,665,857 tons, valued at £33,049,372 :—

Period.	Quantity.	Average per ton.	Value.
	tons.	s. d.	£
Prior to 1830	50,780	10 0	25,393
1830 to 1839	111,069	8 9	50,525
1840 ,, 1849	349,961	9 2	155,083
1850 ,, 1859	1,481,761	12 11	1,004,924
1860 ,, 1869	6,174,132	10 2	2,961,910
1870 ,, 1879	12,530,044	10 7	6,838,888
1880	1,466,180	8 5	615,336
1881	1,769,597	6 10	603,248
1882	2,109,282	9 0	948,965
1883	2,521,457	9 6	1,201,942
1884	2,749,109	9 6	1,303,077
1885	2,878,863	9 4	1,340,213
1886	2,830,175	9 2	1,303,164
1887	2,922,497	9 3	1,346,440
1888	3,203,444	9 1	1,455,198
1889	3,655,632	8 11	1,632,849
1890	3,060,876	8 4	1,279,089
1891	4,037,929	8 8	1,742,796
1892	3,780,968	7 9	1,462,388
1893	3,278,328	7 2	1,171,722
1894	3,672,076	6 4	1,155,573
1895	3,738,589	5 10	1,095,327
1896	3,909,517	5 9	1,125,281
1897	4,383,591	5 7	1,230,041
Total	76,665,857	8 7	33,049,372

has been a general decline in the price obtained per ton since 1883, his respect coal has not differed greatly from other produce. In lier years, however, there were fluctuations in prices which, to a tent, arose from uncertainty in the markets. This uncertainty er exists, for the local markets and those of the other Australian demand a large share of the coal raised. The proportion of the ion taken by Australasia increases almost every year, and operates irection of steadying the price, by removing the principal cause uation. The highest average price obtained during any year was , the first of the Crimean war, and the third after the commence- the gold rush, when the price per ton was not less than 20s. 6d. 2 the output reached 1,000,000 tons; ten years later it had d to 2,000,000; and in 1891, to a little over 4,000,000 tons;

the yield decreased to 3,280,000 tons in 1892, but since that d steadily increased year by year until 1897, when no less than 4 tons were raised, the record production for one year.

The colony was its own chief customer during 1897, whe the total production stated above, the local consumption amo 1,686,968 tons, or 38·5 per cent. Victoria was its principal abroad, taking 700,503 tons, or nearly 26 per cent. of a total 2,696,623 tons. The quantity of coal required for local con denotes a satisfactory increase during most years, as the follow ment shows :—

Year.	Tons.	Year.	Tons.
1888	1,279,572	1893	1,443,238
1889	1,287,930	1894	1,546,951
1890	1,239,002	1895	1,572,359
1891	1,523,561	1896	1,434,610
1892	1,589,263	1897	1,686,968

The annual consumption per head increased from 16 cwt. i over 25 cwt. in 1897. The larger use of steam for railway loc and for manufacturing, smelting, and other purposes, as we multiplication of gas-works, accounts for a great portion of the i but it must also be borne in mind that there is a large and demand for bunker coal for ocean-going steamers, which appea an export, but as required for home consumption. The amoun taken by the steamers during 1897 was about 350,000 tons.

The quantity of coal supplied to the customers of the colon shows also a large increase during this period :—

Year.	Tons.	Year.	Tons.
1888	1,923,872	1893	1,835,090
1889	2,387,702	1894	2,125,125
1890	1,821,874	1895	2,166,230
1891	2,514,368	1896	2,474,907
1892	2,191,705	1897	2,696,623

As the coal trade of 1890 was hampered by the strike of t the exports of 1891 necessarily showed a large advance on 1890 ; still, even if compared with the year 1889, the trade exhibited satisfactory progress, while in 1892 the exports fell below those of 1891, but even below those of 1889. A furt decrease in the exports took place in 1893, but the figures for 1895 showed a slight recovery, and in 1896 and 1897 the imp cided, the export during the latter year being 182,255 han the previous record. The customers of New South al during the year 1897 will be found in the following which it will be seen how wide is the circle which relies ny for the supply of one of the chief necessaries of civilised

or Port.	Tons.	Country or Port.	Tons.
	700,503	Fiji	20,965
ia	355,443	New Caledonia	12,745
	344,545	United Kingdom	8,443
	286,392	Mauritius	8,406
ralia	196,644	Celebes	6,360
	155,142	South Sea Islands	5,558
ands	92,249	Ceylon	5,106
	74,416	Japan	4,805
nents	73,821	Cape Colony	3,792
	69,833	Ecuador	2,667
	59,383	Cochin China	1,589
	55,496	China	1,570
inds	45,009	New Guinea	1,206
	31,877	Kaiser Wilhelms Land	429
	26,647	New Pommern (New Britain)	30
	24,149		
	21,403	Total	2,696,623

th of the colony in coal is enormous, and the further expan- industry may be regarded as almost a certainty. As the alian Continent is only in the early period of the develop- immense resources, so also may the coal-mining industry of Wales be said to be in its infancy. It is, however, a very fancy, giving promise of a great future.

th Wales coal, especially that obtained in the northern pares favourably as a heat producer with the best foreign s the advantage of a greater specific gravity, and it contains r. The result of analyses made of coals from various the colony showed that the mean specific gravity of the istrict coals was 1·300; of the Western coals, 1·346; and of n coals, 1·394; while the mean of a number of samples of l was 1·279. Carbon was present to the extent of 79·28 per Northern, 70·75 per cent. in the Western, and 79·40 per Southern coal, the proportion in the British coal being 80·40 The proportion of hydrogen, oxygen, and nitrogen is very ame in the Australian as in the British coal, but the latter ly smaller percentage of ash. The steam-producing power from the Northern districts of the colony is almost equal t from the South and West a little below, the generating e coal raised in Great Britain.

COKE.

The quantities of coke manufactured in New South Wales dur
last eight years were as follow :—

Year.	Quantity.			Total
	Northern District.	Southern and Western Districts.	Total.	
	tons.	tons.	tons.	
1890	15,886	15,211	31,097	41,
1891	9,474	20,836	30,310	34,
1892	5,245	2,654	7,899	8,
1893	12,262	5,596	17,858	20,
1894	13,602	20,856	34,458	32,
1895	11,326	16,304	27,630	24,
1896	10,399	15,953	26,352	21,
1897	21,012	43,190	64,202	45,
Total	99,206	140,600	239,806	229,

During the same period the imports into the colony were :—

1890..38,174 tons
1891..76,542 „
1892..61,852 „
1893..61,874 „
1894..47,586 „
1895..42,526 „
1896..43,134 „
1897..32,451 „

Almost the whole of this was imported *via* South Australia
Barrier district, where it was used for smelting purposes. The r
of the South Australian Customs Department show that by f
largest quantities of this coke came originally from the United Ki
and from Germany. At Broken Hill, the Proprietary Company
have consumed about 1,000 tons per week. It seems a singular ci
stance that the silver-miners of New South Wales should have so l
relied on England and Germany for their coke when the colony po
unlimited supplies of coal from which excellent coke can be
factured. It is true that complaints have been heard that the c
coke contains a higher percentage of ash than the imported cok
that it is too friable, causing a large percentage of loss through a
in transport, while the coke, it has been said, arrives in such small
as to be unfit for smelting the fine lead ores. A few years ago, h

Pittman, in a report upon this subject, brought figures to prove t much of the foreign coke used by the Broken Hill Proprietary mpany contained a greater percentage of ash than some of the nial-made cokes; also that the strength—or capacity for resisting akage—of the colonial cokes was greater—in some instances much ater—than that of the imported coke. It would seem that coke of al manufacture is at length making its way, judging from the great ease in the production in 1897.

At the old Bulli mine a coal seam 6 feet thick has been for about that thickness transformed into a sort of natural coke, apparently ugh the intrusion of igneous matter underneath the seam. This al coke is largely used on the Sydney tram-motors.

KEROSENE SHALE.

This mineral is found in various parts of the colony, but principally Hartley, Katoomba, Megalong, Bathgate, near Wallerawang, Joadja k, Berrima, Mount Kembla, Burragorang, and Greta; and also at ey Creek, near Murrurundi, in the Capertee district, and in the ey of the Wolgan River. The shale occurs in saucer-shaped deposits, ying in thickness from a few inches to 6 feet. It is a species of nel-coal, similar to the Boghead mineral of Scotland, but yielding a ch larger percentage of volatile hydro-carbon than the Scotch mineral. e richest quality yields about 100 to 130 gallons of crude oil per ton, 17,000 to 18,000 cubic feet of gas, with an illuminating power of rty-five to forty sperm candles when gas only is extracted from the le. The specific gravity of the best Joadja Creek and Hartley shale ·06, the amount of sulphur 0·49 per cent., and the yield of tar 40 ons per ton. It is found advantageous for mixing with ordinary for the manufacture of gas, and is largely exported to Great ain. America, and other foreign countries, as well as to the hbouring colonies, for gas purposes. On analysis the following lt was obtained from average specimens:—

Volatile Hydro-carbons, including moisture	82·50 per cent.
Fixed Carbon	6·50 ,,
Ash	11·00 ,,

At present only two companies—the New South Wales Shale and Company and the Australian Kerosene Oil and Mineral Company— k kerosene shale in the colony, their mines being situated at Hartley le, Genowlan, Ruined Castle, and Nellie's Glen, in the Western Dis- t; and at Joadja, in the Southern district. These companies not y raise shale for export, but also manufacture from it petroleum oil other products. The production of kerosene shale from the opening of the mines in 1865 to the end of 1897 amounts to 929,424 t the value of £1,835,825, as shown in the following table :—

Year.	Quantity.	Average price per ton.	Total value.	Year.	Quantity.	Average price per ton.
	tons.	£ s. d.	£		tons.	£ s. d.
1865-67	7,4 9	3 9 5	25,749	1890	56,010	1 17 2
1868-72	58,772	2 13 9	157,886	1891	40,349	1 18 9
1873-77	71, 08	2 12 9	187,793	1892	74,197	1 16 8
1878-82	152,050	1 18 8	293,729	1893	55,660	1 16 4
1883	49,250	1 16 11	90,861	1894	21,171	1 10 0
1884	31,618	2 5 8	72,176	1895	59,426	1 5 4
1885	27 462	2 9 0	67,239	1896	31,839	1 1 6
1886	43,563	2 5 11	99,976	1897	34,090	1 3 9
1887	40,010	2 3 10	87,761			
1888	34,869	2 2 3	73,612			
1889	40,561	1 18 3	77,667	Total ...	929,424	1 19 6

The features of this table are the steady fall in the average p the mineral and the fluctuating production. There is no special for the rise and fall in the quantity of shale produced from y year beyond the irregularity in the orders coming forward for and the slackening of mining operations while the mineral at being reduced. It does not necessarily follow, either, that the production of any one year is put to actual use. A certain prop of second-grade mineral must be taken out with the first quality, there is only an outside demand for the higher grade, it d altogether upon their ability to compete with the imported oil w the local companies make use of the second quality at all. At the mines of the colony in 1897 there were 246 men employed under g and 107 above ground, or a total of 353.

DIAMONDS AND OTHER GEM-STONES.

The existence of diamonds and other gem-stones in the territ New South Wales has been known for many years, but no attem made to work the deposits until the year 1872. In the course following year several deposits of adamantiferous wash were disc in the country near Inverell, in the New England district. diamonds occur in old tertiary river drifts, and in the more recent derived from them. The deposits, which occur in the Inverell, Bi Mittagong, Cudgegong, and Narrabri districts, are extensive, an not yet been thoroughly prospected. The best of the New South diamonds are harder and much whiter than the South African di and are classified as on a par with the best Brazilian gems. Duri year 1889 the Malacca Company, near Tingha, found diamonds w 2,195$\frac{3}{8}$ carats, valued at £878 5s. In 1891 no less than 12,000 of diamonds were won in the Tingha and Inverell districts, but n is given. In 1892 as many as 2,250 diamonds were obtained fr lministered for the purposes of Public Instruction. The unsold and School Lands thus transferred are situated as follow :— ounty of Gloucester, 172,297 acres; Bathurst, 83,649 acres; St. , 18,229 acres; Cumberland, 3,973 acres; Durham, 3,361 acres; nberland, 744 acres; Hunter, 48 acres; and Camden, 3 acres.

ustralian Agricultural Company was incorporated by an Act of erial Parliament, dated the 21st June, 1824, and a promise of a f 1,000,000 acres made to this Company was fulfilled in the fol- year. Originally a grant containing 1,048,960 acres was selected country surrounding Port Stephens, but in 1832 the Company thorised to exchange a portion of this grant, containing 600,000 for two allotments situated on the Peel River and on the ool Plains. These three grants contain, according to the latest , the following areas :—

	Acres.
Port Stephens Estate, county of Gloucester	464,640
Peel River Estate, county of Parry	249,600
Warrah Estate, county of Buckland	313,298
Total	1,027,538

ldition to this large area of land, the Company also obtained he Crown the promise of a lease of the coal-fields at Port Hunter stle) for 31 years. This was, however, afterwards exchanged rant of 500 acres, an area which was increased in 1828 to 2,000 f coal land, upon which the Company's collieries are now situated.

OCCUPATION OF PASTORAL LANDS.

pastoral lands of New South Wales have been occupied under s systems. Land was held for grazing in the early days by of tickets of occupation, which ceased to be issued on the 1st May, after which date persons holding such lands were required to pay rent of 20s. per 100 acres per annum, and to vacate the land at nths' notice. The requirements of the settlers for depasturing increasing stock induced them to occupy Crown lands without any except that of first discovery, and as they extended their opera- inland the Legislature found itself compelled, on the 28th August, to pass an Act protecting Crown lands from intrusion and trespass, commissioners were appointed for the purpose of safeguarding the ts of the State.

e discovery of new country soon had the effect of taking many of the er squatters beyond the limits of settlement as proclaimed on the 14th for the gems is Germany, where they find a ready sale; but it i that the principal gem merchants of Europe have now agents field for the purchase of the stone. In 1896, opal was discov Purnanga, about 40 miles north-east of White Cliffs, but, the of water has retarded development. Some very fine parcels ha raised on this field, bringing as high as £7 per ounce. It is co that Purnanga is the nucleus of a fine opal field should a goo supply become available.

Topazes are obtained largely at Oban, in the Glen Innes di but the price obtained is very low, and only one sale, to the am £20, was reported during the year 1895. Turquoises hav discovered at Mount Lorigan, near Wagonga, and work was ca during the year 1895 by means of aid granted from the Pro Vote. In 1896, however, the mine was closed down.

MICA.

Mica is known to exist in many parts of New South Wales, b never yet been worked, although there is a considerable demand article, especially if in blocks of fairly large size that could easily into thin plates. It is to be met with in the numerous granit that occur in various parts of the colony, especially in the c crystalline granitic formations in the Silverton district, and el in the Barrier Ranges.

ASBESTOS.

Asbestos has been found in veins in serpentine in the Gu Bathurst, and Barrier Range districts—in the last-named in consi quantities.

ALUNITE.

Alunite occurs as a large deposit at Bulladelah, about 35 mil Port Stephens, the yield averaging about 80 per cent. of alum. 1897, 724 tons of alunite, valued at £2,172—as compared wit tons, valued at £4,116, during 1896—were shipped to E where it is found that the stone can be treated more cheaply possible locally, and in consequence the company's works at Bul are closed.

MARBLE, BUILDING STONES, FIRE-CLAYS, AND SLATES.

The colony possesses a most abundant supply of all the vario of stone and other materials for the building and adornment of it Marble limestone is found in great masses near Wallerawang, B Molong, Marulan, Tamworth, and Kempsey, localities which within convenient distance of the great arteries of communicati it is obtainable in all its different varieties. Marble quarries ha ed at Cow Flat, Marulan, Wallerawang, Orange, and Tamworth; the marble deposits are not receiving the attention they deserve, and ccessful effort has yet been made to supply the local demand. cost of quarrying and the carriage to Sydney would, of course, be y. Granite is found near Goulburn, Moruya, Trial Bay, and on ga Island, as well as at many other places throughout the colony. of the granite hitherto used in Sydney has been obtained from ya, a port about 180 miles south of Sydney.

stone flux is supplied to the Broken Hill silver-mines from ies at Tarrawingie, which are connected with the mines by a tram-30 miles in length. The quantity so supplied since 1891 is shown following table :—

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	tons.	£		tons.	£
1891	74,057	65,357	1895	104,194	68,160
1892	103,368	93,031	1896	88,924	54,261
1893	130,635	111,041	1897	67,590	41,798
1894	89,990	69,290			

number of hands employed has been greatly reduced, owing to the shutting down of the local furnaces, and possibly in the near the demand for flux will cease altogether, resulting in the page of the quarries. The average number of men employed during was about 100. A company forwarded large quantities of lime- from Myall Lake to Sydney in 1892, and commenced the facture of hydraulic lime; and since the establishment of sulphide at Cockle Creek, the limestone flux used there has been supplied this district.

Hawkesbury formation, over which the City of Sydney is built, vides the city with an inexhaustible supply of sandstone, of the st quality for building purposes. This material is admirably pted for architectural effect, being of a pleasant colour, fine grain, very easily worked. The beauty of Sydney street architecture is due o inconsiderable degree to the free use of this excellent sandstone.

alt or bluestone, which is extensively used as road metal and for ballasting of the railway lines, is obtained at Kiama, Prospect, ant Hills, and Bowral.' This stone has not yet been used to any at for building purposes.

enite, a stone even harder than bluestone, is found at Bowral and r places; as a building material it is equal to granite in solidity, and, like granite, it takes a beautiful polish. The success which h attended its first use as a building stone, together with the sho distance from the metropolis at which it is to be found, will no doub cause it to be extensively used in the future for large structures.

Kaolin is being worked at Tichbourne, near Parkes. The clay is excellent quality, and superior to the best obtained in England or Fran

The coal measures also contain numerous beds of fire-clays; and every part of the colony excellent clays, well adapted for brick-mak purposes, are extensively worked. Slates are found in several distric but are principally quarried at Gundagai and in the surroundi district, as well as at Bathurst and Goulburn. It will be seen, the fore, that the colony has no need to import building material of description, as it possesses a supply amply sufficient to provide for own wants and those of its neighbours.

Graphite has been obtained at Undercliff, in the New England d trict, from a lode 6 ft. wide, but it is of inferior quality. In 18 27 tons were sent away, but only realised 20s. per ton. This price w not pay, consequently all leases taken up for the mineral have be abandoned.

PROSPECTING VOTE.

. Following the practice of the neighbouring colony of Victoria, th Government have for some years past devoted a sum annually to en couraging prospecting for gold, and in 1889 the conditions of the vot were so amended as to embrace all minerals. The amount set ap annually has been £20,000. For the year 1892, however, it was fix at twice that sum; and during each of the years 1896–7 and 1897- the sum of £25,000 has been available. With the exception of the Mount Drysdale gold-field, which was discovered in 1892, it cannot be claimed that any discovery of a large payable field has so far been mad by means of the Prospecting Vote, but at the same time it may be sai that some rich working claims have been opened up with the aid granted Also, in addition to the employment of labour, the proving of a lode o reef to be payable invariably leads to the taking up of large areas o adjoining land under the Mining Act, from which increased revenue i derived by the State. From the year 1888 to the end of 1898, th number of such discoveries reported to the Department of Mines wa 190, while the amount expended in prospecting work up to the 30th June, 1898, was £220,572.

Miners desiring a grant from the vote have to satisfy the Prospectin Board that the locality proposed to be prospected is one likely to yiel the mineral sought for, and that the mode of operations is suitable f its discovery. Aid is given in deserving cases up to 50 per cent. of th value of the work done and of the necessary implements and material Miners who have been assisted from the vote are not entitled to clai any reward that may be offered for the discovery of any new gold mineral field.

DIAMOND DRILLS.

The use of the diamond drill in searching for minerals dates only from 81, and boring by the Department of Mines commenced much later. e drills now in use belong for the most part to the State, and are lent private persons on terms fixed by regulation. The charges were merly £2 2s. on application, towards cost of inspection; £10 per ek for cost of diamonds and wear and tear of machinery from start bore till completion; wages of foreman and assistants; cost of tubes maged, destroyed, or which cannot be withdrawn from bores; all arges for freight, etc., on machinery, both on being sent and returned; d cost of all fuel and water necessary for working the drill. This rangement proved unsatisfactory, so the alternative system of paying fixed price per foot bored has been generally adopted, the hirer paying cording to the nature of the country, at the rate of 15s. to 20s. per ot bored up to 1,000 feet, and the fee increasing 5s. per foot for every bsequent 500 feet. This charge covers the cost of diamonds, wear d tear of machinery, and wages of foreman and assistants. The other arges were only modified in one particular: the drill has now to be turned to the nearest railway station, the Department defraying penses to Sydney. An abatement may be granted by the Mines epartment in special cases.

During the year 1897 the depth bored was 1,680 feet, the average ost per foot being 17s. 9$\frac{11}{16}$d., as compared with 11s. 4$\frac{13}{16}$d. in 1896. he earnings of the diamond drills during 1897 amounted to £1,047, as mpared with £1,433 in the previous year, and the amount paid into he Treasury as revenue from this source was £594, in addition to 491 transferred from the Prospecting Vote—in all, £1,085. In ddition to the bores shown in the subjoined table, operations were ntinued at the island of Funafuti, in the Ellice Group, to elicit thentic information respecting the formation of coral beds:—

Locality.	Strata.	Mineral for which bored.	Actual depth of bores.		Total depth bored during 1897.		Cost per foot.	
			ft.	in.	ft.	in.	s.	d.
rest Reefs, No. 7	Basalt	Gold	224	9	224	9	17	10
,, No. 8			206	0	206	0		
,, No. 9			224	6	224	6		
,, No. 10			209	0	180	0		
nction Point Reefs, No. 1	Slate, diorite, and granite.	Gold	270	3	204	3		
,, ,, No. 2			230	0	225	0		
,, ,, No. 3			151	6	115	6		
sy Gully	Felsite	Auriferous quartz veins.	300	0	300	0		
Total			1,816	0	1,680	0	17	10

There has been a good deal of fluctuation in the demand fo employment of the diamond drill in mining. The depth bored in year since 1891 was as follows:—

Year.	Depth bored.	Year.	Depth bored.
	feet.		feet.
1891	7,797	1895	299
1892	4,139	1896	2,143
1893	1,903	1897	1,680
1894	557		

The adoption of the alternative system referred to above, under the use of the diamond drill can be made available at an almost no cost in basaltic or other mineral country which has not been prosp and which is either too hard, wet, or deep, and, therefore, too exp for sinking, has had satisfactory results. As will be seen, the depth bored increased from 299 feet in 1895 to 2,143 feet in Although the depth bored in 1897 shows a decrease of 463 fe compared with 1896, the number of bores put down in each yea the same. Four of the companies hiring drills in 1897 had previ sunk shafts, and had put in stand pipes varying in length from 5 to 66 feet before boring operations were commenced. This acc for the difference between the depth bored and the actual depth bores shown in the table on the preceding page.

se of land of 100 acres or more in extent may be subdivided, the e paid on a portion, not less than 40 acres, and the deed obtained it part.

following table shows the total amount payable as principal terest every year on a selection of 40 acres, the price of which, at interest, is £40. It will be seen that the amount of interest le is £24 3s., making a total of £64 3s., or £1 12s. 1d. per

When due.	Payments.			How each payment is applied.						Balance owing.			Amount upon which interest is charged.		
				Interest, 4 % for 1 year.			Principal.								
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
it of 2s. per acre.............	4	0	0	......			4	0	0	36	0	0	......		
ment of 1s. per acre at end of 3rd year ...	2	0	0	......			2	0	0	34	0	0	......		
" 4th " ...	2	0	0	1	7	2	0	12	10	33	7	2	34	0	0
" 5th " ...	2	0	0	1	6	9	0	13	3	32	13	11	33	7	2
" 6th " ...	2	0	0	1	6	2	0	13	10	32	0	1	32	13	11
" 7th " ...	2	0	0	1	5	7	0	14	5	31	5	8	32	0	1
" 8th " ...	2	0	0	1	5	0	0	15	0	30	10	8	31	5	8
" 9th " ...	2	0	0	1	4	5	0	15	7	29	15	1	30	10	8
" 10th " ...	2	0	0	1	3	10	0	16	2	28	18	11	29	15	1
" 11th " ...	2	0	0	1	3	2	0	16	10	28	2	1	28	18	11
" 12th " ...	2	0	0	1	2	5	0	17	7	27	4	6	28	2	1
" 13th " ...	2	0	0	1	1	10	0	18	2	26	6	4	27	4	6
" 14th " ...	2	0	0	1	1	1	0	18	11	25	7	5	26	6	4
" 15th " ...	2	0	0	1	0	3	0	19	9	24	7	8	25	7	5
" 16th " ...	2	0	0	0	19	6	1	0	6	23	7	2	24	7	8
" 17th " ...	2	0	0	0	18	8	1	1	4	22	5	10	23	7	2
" 18th " ...	2	0	0	0	17	10	1	2	2	21	3	8	22	5	10
" 19th " ...	2	0	0	0	17	0	1	3	0	20	0	8	21	3	8
" 20th " ...	2	0	0	0	16	0	1	4	0	18	16	8	20	0	8
" 21st " ...	2	0	0	0	15	1	1	4	11	17	11	9	18	16	8
" 22nd " ...	2	0	0	0	14	1	1	5	11	16	5	10	17	11	9
" 23rd " ...	2	0	0	0	13	0	1	7	0	14	18	10	16	5	10
" 24th " ...	2	0	0	0	12	0	1	8	0	13	10	10	14	18	10
" 25th " ...	2	0	0	0	10	10	1	9	2	12	1	8	13	10	10
" 26th " ...	2	0	0	0	9	7	1	10	5	10	11	3	12	1	8
" 27th " ...	2	0	0	0	8	6	1	11	6	8	19	9	10	11	3
" 28th " ...	2	0	0	0	7	2	1	12	10	7	6	11	8	19	9
" 29th " ...	2	0	0	0	5	11	1	14	1	5	12	10	7	6	11
" 30th " ...	2	0	0	0	4	6	1	15	6	3	17	4	5	12	10
" 31st " ...	2	0	0	0	4	1	1	15	11	2	0	5	3	17	4
" 32nd " ...	2	0	0	0	1	7	1	18	5	0	2	0	2	0	5
al payment......................	0	3	0	......			0	3	0	......			......		
Total	64	3	0	24	3	0	40	0	0	......			......		

n the course of the year 1896, however, an Act was passed for the f of holders of conditional purchases who found the ordinary rate payment too burdensome. Under this Act the Minister for Lands is given power to reduce the annual instalment of 1s. per acre to even 6d. per acre, always provided that under the reduced rat balance of purchase money with the interest thereon will be extingu within sixty-six years from the date when the first instalment payment of the deposit became due. The conditional purch respect of which relief is requested must form part of the holdi which the applicant resides, unless the Minister is satisfied th applicant holds the land *bona fide* for his own use, and is not a make payment at the original rate, and is not the holder of a gr area than is necessary for the maintenance of a family.

Non-residential Conditional Purchases.—Any person of or ove age of 21, who has never taken up an ordinary residential condi purchase, may take up a non-residential conditional purchase in the Eastern or the Central Land Division. The maximum area i acres, and the conditions are the same in both divisions. The per acre, and the amount of the deposit and of the instalments double those fixed for an ordinary residential conditional purchase the scale of survey fees is the same. This form of selection do entitle the purchaser to hold a conditional lease. The land mu fenced in within twelve months from the date of confirmation; within five years from that date the holder must satisfy the Board permanent improvements (not including the boundary fencing) been made to the value of £1 per acre. If the substitution of oth provements in lieu of fencing be obtained in connection with a residential conditional purchase, the sum expended must be at the of 30s. per acre. The only addition which a holder can make to purchase is by increasing it to the maximum area.

Conditional Purchases within Special Areas.—Special areas may reserved from the operations of the ordinary conditional purchase cla of the Act, and thrown open to selection under different terms payment, with or without the condition of residence; but in special areas the price of the land cannot be less than £1 10s. per if the selector elect to fulfil the condition of residence, while a resident purchaser is charged double that price. The maximum minimum areas that may be selected within special areas are alw specified in the proclamation throwing the lands open, but the maxim cannot exceed 320 acres in the Eastern Division, nor 640 acres the Central and Western Divisions. The deposit required is stated in the proclamation, being generally one-tenth of the price, the instalments are one half the amount of the deposit. As in the of ordinary conditional purchases, the Relief Act of 1896 has given Minister for Lands power to reduce the rate of instalments previo payable to three-quarters or one-half. The conditions to be fulfilled similar to those of the ordinary residential and non-residential ditional purchases. Conditional leases of ordinary land can be ta up by virtue of conditional purchases within special areas, but only in Central Division.

ollowing is the scale of survey fees for conditional purchases of ription :—

Area.	For an Original Conditional Purchase.			For an Additional Conditional Purchase or Conditional Lease.		
	£	s.	d.	£	s.	d.
area not exceeding 4 acres.	1	0	0	0	15	0
y additional acre, or fraction of an acre, up to cres	0	3	4	0	2	6
cres	2	0	0	1	10	0
y additional acre, or fraction of an acre, up to cres	0	2	0	0	1	6
cres	3	0	0	2	5	0
y additional acre, or fraction of an acre, up to cres	0	1	0	0	0	9
cres	4	0	0	3	0	0
y additional 5 acres, or fraction of 5 acres, up 0 acres	0	2	6	0	1	10½
cres	5	0	0	3	15	0
y additional 10 acres, or fraction of 10 acres, to 320 acres	0	2	6	0	1	10½
acres	8	0	0	6	0	0
y additional 15 acres, or fraction of 15 acres, to 640 acres	0	2	6	0	1	10½
acres	10	15	0	8	1	3
y additional 20 acres, or fraction of 20 acres, to 1,280 acres	0	2	6	0	1	10½
0 acres	14	15	0	11	1	3
y additional 40 acres, or fraction of 40 acres, to 2,560 acres	0	2	6	0	1	10½
0 acres	18	15	0	14	1	3

litional purchases and conditional leases may be converted into ead selections, on terms stated under the latter heading.

Auction Sales.—Crown lands may be submitted for sale by in each Land Division, but not more than 200,000 acres can alienated in any one year. The area of town lots is limited an-acre each, and the upset price cannot be less than £8 pe suburban lots cannot be sold in areas exceeding 20 acres, or at upset price than £2 10s. per acre; country lots cannot exc acres, and the minimum upset price is 25s. per acre. Under c auction sales the payment must be completed within three mon arrangements may be made under a system of deferred payme minimum prices, however, not being less than those given ab every case a deposit of 25 per cent. must be paid, and the p cannot extend over a longer period than five years. Deferred p bear interest at the rate of 5 per cent. per annum.

After Auction Sales.—Any town or suburban Crown lands, or lands within population areas, which have been offered for auction and not sold, may be taken up at the last upset price by any person applying for the same, subject to the approval Minister. At the time the application is lodged, one-fourth upset price is required to be paid, and the balance on the app the application. The sale is subject to the same conditions prescribed in connection with the submission of the land at au

Improvement Purchases.—Persons who, by virtue of a mine or business license issued under the Mining Act, are in au occupation of and residing on land within a proclaimed gold-fi in consideration of improvements made thereon, apply to th Land Agent for permission to purchase the land without com at a price to be fixed by the Land Board. The area, however, is to 1 rood of town land and 1 acre of other land, and a distan miles must separate any two or more portions purchased by t applicant.

Special Purchases.—Reclaimed lands, unnecessary roads, wat ages, land to which no way of access is obtainable, land insuffi area for conditional purchase, and other areas of a similar natu be sold to the holder of the adjacent property without competit in all such cases the price is fixed by the Land Board.

Volunteer Land Orders.—Any person who was enrolled as a v between the years 1868 and 1875, and underwent five years' co training, is entitled to a free grant of 50 acres open for conditio chase; but this form of alienation is now virtually extinct, grants being made in 1893, none during 1894 and 1895, one 1896, and four during 1897. The orders are transferable.

Exchanges.—Under the 46th section of the Act of 1889, and 47 Act of 1895, provision is made for the surrender of land in cases in exchange for land of equal value, and without any consideration.

ight years, and pending appraisement a provisional rent of
e is payable annually. The first appraisement made by the
d stands for fifteen years, and for the remaining period the
ject to a reappraisement.

tional purchases other than within special areas cannot, under
gislation, be taken up in the Western Division, no conditional
btainable there. The conditional leases current in this division
nptive leases converted under the provisions of the Land Act

time during its currency a conditional lease or any portion of it
the previous series may be converted into an additional con-
rchase, and as this right is almost invariably availed of the land
conditional lease may practically be considered as alienated.

nt Leases for Agriculture and Grazing.—These areas, like
selections, are specially set apart by notification in the
t Gazette. The land is measured, and each portion is valued
to its capabilities and situation. Areas set apart for agricul-
oses cannot exceed 1,280 acres, but for grazing purposes the
is 10,240 acres. The term of a lease is twenty-eight years,
nnual rent is 1¼ per cent. on the capital value. Six months'
ther with the prescribed survey fee, must accompany the
n. The appraised value of improvements on the land when
with interest at 4 per cent. per annum, may be paid in three
rly instalments. The conditions are continuous residence
e term of the lease, and the enclosing of the holding within
from the issue of the lease; the lessee is also required to
o any regulations made regarding noxious animals and the
scrub, and such other provisions as may be deemed expedient
lic interest. The lease cannot be assigned or sub-let without
nt of the Minister. During the last year of the term the
apply for that part of the lease on which his residence stands
stead selection, the area not to exceed 1,280 acres.

lowing is the scale of survey fees for settlement leases. In
here the cost of survey proves to be less than the scale rates,
nce may be refunded:—

	£	s.	d.
60 acres, as for an original conditional purchase (*see* page 271.)			
acres	18	15	0
additional 40 acres up to 3,840 acres, 2s. 6d.			
acres	22	15	0
additional 40 acres up to 5,760 acres, 2s.			
acres	27	11	0
additional 40 acres up to 7,680 acres, 1s. 6d.			
acres	31	3	0
additional 40 acres up to 10,240 acres, 1s.			
40 acres	34	7	0

Improvement Leases.—This form of lease, like settlement le
homestead selections, is an introduction of the Crown Lands Ac
The lands which may be taken up are comprised of scrub and
land in any division. They are disposed of either by auction o
and in no case can the area of a lease exceed 20,480 acres. T
of a lease is twenty-eight years; the rent is the amount bid at
or accepted by tender, but an upset price may be fixed, and the C
is not bound to accept any tender. The provisions made fo
provement of the land vary according to the circumstances
case, and the last holder has tenant-right in improvements. R
on the land is not compulsory; but if the lessee resides thereon
during the last year of the term, make application to convert
dential portion into a homestead selection; but the area canno
640 acres, and must carry improvements to the value of £1 pe

Pastoral Leases.—The largest areas taken up for pastoral
are held under this form of lease. Under the Act of 1884 t
holdings of the squatters were each divided into two portio
respectively the resumed area and the leasehold area. The
area was leased under occupation license, renewable annually,
land remained open for selection under conditional purchase an
tional lease. The leasehold area was returned to the lessee,
entitled to hold it for a fixed term of years, varying in each La
sion. In the Eastern Division the pastoral leases expired in 1
they cannot now be renewed, nor can fresh areas be leased.
Central Division pastoral leases terminated in 1895, but in ac
with the privilege granted under the Act of 1889, a great numb
leases have been extended for short periods, varying from one to fi
Provision has, however, been made in connection with these ren
the withdrawal of such portions as may be required under oth
of settlement. After due inquiry by the Land Board, the Min
authorise the division of the area into two parts as nearly eq
practicable, and the portion from which withdrawals may be
subsequently defined. By way of compensation for such with
a further extension of time is given for the remainder of the le

The pastoral leases in the Western Division were, under th
1884, given a currency of fifteen years, which was increased to
one years by the Act of 1889, and by the Crown Lands Act
the term was further extended to twenty-eight years, calculat
the commencement of the lease. The rent of each lease varies
appraised value of the land, and lessees have tenant-right in
ments. The resumed area may be amalgamated with the lease
in cases in which the Local Land Board, after inquiry, is sati
such resumed area is not required and is not likely to be req
settlement before the expiration of the pastoral lease. Withd
portions of the pastoral leases for settlement purposes may
in the Western Land Division as in the Central; but the s
area which can be withdrawn is limited to one-eighth of the l

land must not be more than 10 miles distant from the
of a town containing at least fifty inhabitants.

tion Licenses.—Land held under occupation license consists
the resumed areas of pastoral holdings divided by the Act of
the expired leases of the Eastern and Central Divisions
hdrawn from pastoral lease for settlement in the Central and
Divisions may also be held under occupation license. A
ssee in the Central Division has a preferential right to an
n license of any area formerly held by him under pastoral lease,
th the Central and Western Divisions this privilege extends to
drawn from the existing lease for settlement purposes. The
annual, covering the calendar year, and the fee is payable at
of granting or renewing the license. Under an amending Act,
1896, land held under occupation license may be withdrawn
holder on receipt of an application for such land as a home-
ction, or under settlement lease, provided the holder of the
n license is informed of the application by the Land Agent
e week of its receipt.

n Well Leases.—Holders of occupation licenses or annual leases
up artesian well leases. Only one such area may be leased out
4,000 acres held under occupation license, and not more than
s out of the same occupation license, the total extent of an
ell lease being limited to 10,240 acres.

ead Leases.—This form of lease is granted for the resumed
he vacant lands of the Western Division only; lands held under
ase or occupation license are, therefore, open to homestead
e minimum area obtainable is 2,560 acres, and the maximum,
cres. If the maximum area is not taken up in the first
additions may be made until that area is reached, but these
may not consist of less than 2,560 acres, except in certain
en the minimum additional area may be 640 acres. Addi-
ses terminate on the same date as the original lease, and have
ntly a shorter term. The term of lease is twenty-eight years,
ent is appraised every seven years. A deposit of 1d. per acre,
on account of survey fee, is required on making the application.
sixty days from the date on which the lease is gazetted the
f the cost of survey is due; and the rental is payable annually
e. Continuous residence for six months in each year for the
years is required. Residence must commence within ninety
n the approval of the lease; but the lessee may, at his own risk,
occupation immediately after making application. The date of
ing the six months' residence in any year must be previously
o the Local Land Board. The boundaries of the land must be
within two years from approval of the lease with such a fence
oard may prescribe; upon satisfactory cause being shown,
a suspension of the conditions as to residence and fencing may

be obtained, and an extension of time grant
empowered to make inquiry as to whether
adhered to by the lessee, and the lease is
event of their non-fulfilment. Arrangements
stead leases are required to be in writing,
document sent to the Chairman of the Local
of this regulation being taken as evidence
in good faith. After the conditions as to resi
is transferable. The portion of the lease on
dwelling may, during the last year of the
homestead selection.

Annual Leases.—Crown lands which are
of lease, and are not exempt from lease, may
any Land Division by auction or tender, or
not exceeding 1,920 acres; and lands reser
held from annual lease. The minimum ren
for every 640 acres or lesser area. An orig
first day of the month following its notific
the land has been leased at auction, the first
the date of sale; but the first year expires
being charged only for the number of month
hold has been occupied, so that all renew
calendar year. Improved lands let on annu
additional rent for the use of improvement
ments do not belong to the Crown an agree
the parties concerned, failing which an app
Land Board. The improvements must be
character and necessary for the occupation
valuation the owner may, with the permission
such as are of a removable nature. Under
stead Selections and Settlement Leases) Act
land held under annual lease is withdrawn
as a homestead selection or under settlement
must notify the holder of the annual lease
receipt of the application.

Scrub Leases.—Lands, whether vacant or
covered with scrub or noxious undergrowth
dation of the Local Land Board in any distri
and after notification in the *Government*
auction or tender, or upon application, for
ing twenty-one years, as the Minister may
Crown Lands Act of 1895, however, the
lands may, upon application, be extended
eight years, the term allowed for impro
leased in this form, scrub lands cannot
license under which they may be held:

be subtracted the receipts
pared with the cost shown
vill be obtained :—

venue Expended—	
eral ses.	Total.
30	20·54
86	22·73
06	18·42
05	19·04
76	19·95
56	17·08
84	15·30
33	15·42
24	16·10
97	15·76
22	14·52

r ended June.

provement. It must, how-
re on surveying is added in
is therefore not altogether a

TION.

legislation of 1861 and its
ons of the settlers under the
of unconditional settlement,

Lots.	Area.
No.	acres.
35,724	16,964
14,128	68,965
62,557	9,244,378
112,409	9,330,307
17,316	1,721,326
24,455	2,786,703
2,114	560,825
1,020	8,944
213	659
286	2,394
612	946
158,425	14,412,104

months he must, if such improvements are not already existing, e such buildings and fences as are required for the actual residence and the beneficial use of the land. Any portion of the land which in opinion of the Minister is required for mining or public purposes, be withdrawn from the lease. Any duly authorised person may e on the land for the purpose of seeking work or winning gol other mineral, and the residential lease confers on the holder no r to do this himself—he must procure the necessary authority befor may do so. Other conditions which may be imposed are specifie the notification. On the expiration or withdrawal of the lease lessee has tenant-right in improvements.

COST OF ADMINISTRATION.

The following statement shows the cost of the administration of Lands Department during the period from 1888 to the 30th June, 189

Year.	Cost of Survey of Lands.	Expenditure for General, Miscellaneous, and Special Services.	Total Cost of Administration.
	£	£	£
1888	248,661	205,747	454,408
1889	223,059	243,378	466,437
1890	224,096	174,284	398,380
1891	232,672	170,495	403,167
1892	209,735	200,859	410,594
1893	180,325	181,135	361,460
1894	155,184	163,145	318,329
*1895	73,770	86,659	160,429
†1896	155,595	163,108	318,703
†1897	147,911	151,435	299,346
†1898	144,302	142,754	287,056

* Six months ended June. † Year ended June.

The figures just given might prove misleading without some refe to the actual revenue received. In the chapter on "Public Fin will be found a statement of the revenue from the Crown lands r, and if from the amount there given be subtracted the receipts mining occupation and the balance compared with the cost shown preceding table, the following results will be obtained :—

Year.	Percentage of Total Revenue Expended—		
	On Survey.	On General Expenses.	Total.
1888	11·24	9·30	20·54
1889	10·87	11·86	22·73
1890	10·36	8·06	18·42
1891	10·99	8·05	19·04
1892	10·19	9·76	19·95
1893	8·52	8·56	17·08
1894	7·46	7·84	15·30
*1895	7·09	8·33	15·42
†1896	7·86	8·24	16·10
†1897	7·79	7·97	15·76
†1898	7·30	7·22	14·52

* Six months ended June. † Year ended June.

figures just given show a decided improvement. It must, how- be borne in mind that the expenditure on surveying is added in instances to the cost of the land, and is therefore not altogether a charge against administration.

PROGRESS OF ALIENATION.

e growth of land alienation under the legislation of 1861 and its quent amendments, and the operations of the settlers under the of 1884, 1889, and 1895 in the matter of unconditional settlement, mmarised below :—

Mode of Alienation.	Lots.	Area.
by auction—	No.	acres.
Town	35,724	16,964
Suburban	14,128	68,965
Country	62,557	9,244,378
Total sales by auction	112,409	9,330,307
ion after auction	17,316	1,721,326
by virtue of improvements	24,455	2,786,703
by virtue of pre-emptive rights	2,114	560,825
of unnecessary roads	1,020	8,944
of water reservations	213	659
by special appraisements	286	2,394
of reclaimed lands	612	946
Grand total of unconditional sales	158,425	14,412,104

As regards conditional sales, the following were applied for und various Acts since the date of the Crown Lands Act of 1861 :—

			Selections applied	
			No.	A
Under the Crown Lands Act of 1861—				
To May 24, 1880			136,389	14,
Under the Crown Lands Act of 1880—				
	No.	Acres.		
1880 (from May 25)	4,927	694,951		
1881	14,220	2,329,202		
1882	14,606	2,392,218		
1883	10,674	1,617,712		
1884	10,657	1,453,937		
Total			55,084	8,4
Total to December 31, 1884			191,473	23,4
Under the Crown Lands Acts of 1884, 1889, and 1895,—				
	No.	Acres.		
1885	5,377	1,165,352		
1886	6,080	963,197		
1887	4,769	793,004		
1888	5,364	865,199		
1889	6,205	903,160		
1890	8,526	1,713,577		
1891	6,154	1,303,414		
1892	4,396	816,399		
1893	3,393	533,805		
1894	2,617	414,355		
1895	1,751	253,431		
1896	1,279	199,450		
1897	1,306	241,789		
Total			57,217	10,
Grand total to December 31, 1897			248,690	33,

e number of selections cancelled, forfeited, lapsed, declared void, converted into homestead selections, together with the balance of voidances, etc., and that of increased over decreased areas, amounted 7,030 conditional purchases, covering 10,512,875 acres, thus reducing 71,660 lots and 23,123,397 acres the number and area of selections h remained in existence at the close of the year 1897. Deeds have issued upon 24,004 completed purchases, covering 2,882,662 acres, hat the number of purchases still standing good, but upon which conditions have not been fulfilled, is 147,656, covering an area of 40,735 acres.

nder the Crown Lands Act of 1895, applications for 1,919 blocks as estead selections were received to the end of 1897, the aggregate area lied for being 692,256 acres. Of the applications lodged, 574, cover- 271,652 acres, were disallowed, while 1,797, amounting to 631,106 s, were confirmed. Applications in respect of 207 blocks were iting consideration at the close of 1897. In addition to the fore- g, there were 78 conversions of conditional purchases, of a total of 14,175 acres, and 25 conversions of conditional leases, comprising 3 acres.

n addition to the alienation of land by conditional and unconditional s, the following were granted under the Volunteer Land Regulations 867 :—

Year.	Area of Volunteer Land Orders granted.	Year.	Area of Volunteer Land Orders granted.
	acres.		acres.
1871	6,049	1886	740
1872	7,317	1887	1,797
1873	2,880	1888	1,433
1874	7,756	1889	783
1875	14,498	1890	882
1876	18,758	1891	1,100
1877	14,079	1892	590
1878	13,022	1893	500
1879	26,506	1894	Nil.
1880	18,886	1895	Nil.
1881	13,876	1896	50
1882	5,649	1897	200
1883	4,358		
1884	4,500	Total	168,145
1885	1,936		

The following table shows the area of land granted for general and religious purposes from 1862 to 1897 :—

Year.	Area of Grants.	Year.	Area of Grants.	Year.	Area of Grants.
	acres.		acres.		acres.
1862	857	1875	673	1888	2,310
1863	808	1876	5,557	1889	1,902
1864	301	1877	2,899	1890	1,506
1865	2,855	1878	1,811	1891	916
1866	12,288	1879	21,762	1892	8,735
1867	13,935	1880	20,637	1893	5,833
1868	11,310	1881	7,113	1894	41,678
1869	3,672	1882	1,969	1895	7,590
1870	11,970	1883	2,535	1896	3,186
1871	4,319	1884	6,626	1897	3,646
1872	1,969	1885	481		
1873	2,535	1886	11,109	Total	240,347
1874	6,626	1887	5,377		

The operations of the various Orders, Regulations, and Acts of Counci and of Parliament for the disposal of the public lands, since th foundation of the colony, have given the following results :—

	Acres.
Area granted and sold by private tender and public auction at prices ranging from 5s. to 20s. per acre, prior to the year 1862	7,146,37
Area unconditionally sold, 1862–1897 inclusive	14,415,341
Area conditionally sold, for which deeds have issued, 1862–97 inclusive	2,882,60
Area granted under Volunteer Land Regulations of 1867 to 31st December, 1897..........	168,14
Area granted for public purposes, 1862–97.....	240,34
Total area covered by deeds or dedication	24,853,07
Area in process of alienation under system of deferred payments standing good on 31st December, 1897..................	20,240,73
Area in process of alienation under system of homestead selection ...	622,86
Area of conditional purchases and conditional leases converted into homestead selections	22,4
Total alienated or in process of alienation	45,73

: has been found impracticable to separate the area alienated by it from that sold by private tender, as the records of early years incomplete upon this point.

he following statement shows the amount paid for lands purchased the State from the year 1821 to the end of 1897 :—

Period.	Amount received.
	£
1821-1861	3,785,002
1862-1871	2,359,548
1872-1881	17,015,358
1882-1891	13,917,457
1892-1898*	8,174,714
Total received...	45,252,079
Less refunds	1,430,367
Net amount received ...£	43,821,712

* To 30th June.

his includes £21,534,166 paid on account of conditional purchases. amount outstanding on conditional purchases at the end of 1897 £11,624,855, making the total amount paid and owing on all lands £55,446,567.

he area leased to pastoral tenants and others at the end of 1897 prised 124,184,284 acres (including leases to miners under the Mining) and was subdivided as follows :—

	Acres.
Pastoral Leases	52,718,545
Occupation Licenses	36,960,446
Conditional Leases..................................	13,150,749
Homestead Leases....................................	10,381,324
Annual Leases	5,960,604
Settlement Leases	1,174,207
Improvement Leases................................	2,286,248
Other Leases	1,403,320
Leases under the Mining Act	148,841
Total..................................	124,184,284

he total available area of the colony is 195,882,150 acres, and ucting the area sold and otherwise alienated, 45,739,090 acres, and area leased, 124,184,284 acres, making a total of 169,923,374 acres, increased areas, supplied the deficiency. What effect the radical introduced by the Land Act of 1895 will have remains to be seen, b is little doubt that great improvement will result from the new

The principal element which contributed to the aggregation landed estates was that of auction sales of country lands, whi measured in vast areas upon the application of the run-hold bought them up generally at the upset price—at first a minimu per acre, raised in 1878 to £1 5s. per acre.

The following analysis of the different methods by which lan been alienated will account for the present state of rural sett Particulars of the auction sales of country lands from the year 1897 inclusive are given hereunder:—

Year.	Lots.	Total Area.	Amount realised.	Avera per
	No.	acres.	£	£
1862	532	29,729	33,208	1
1863	765	15,392	18,163	1
1864	542	31,393	35,549	1
1865	1,289	63,303	71,532	1
1866	801	65,799	68,197	1
1867	806	70,701	75,432	1
1868	729	50,636	52,169	1
1869	1,236	93,428	96,364	1
1870	797	51,722	54,010	1
1871	1,034	49,303	50,270	1
1872	697	61,073	61,505	1
1873	2,274	274,581	278,110	1
1874	4,064	580,753	596,785	1
1875	6,658	978,377	992,786	1
1876	8,040	1,685,650	1,707,323	1
1877	8,380	1,829,613	1,838,457	1
1878	4,564	861.049	1,071,486	1
1879	2,012	353,372	447,557	1
1880	2,082	346,679	419,523	1
1881	2,691	523,657	616,309	1
1882	2,474	503,547	630,494	1
1883	226	25,826	41,268	1 1
1884	397	38,215	72,412	1 1
1885	51	1,654	5.513	3
1886	793	58,088	100,627	1 1
1887	1,124	103,748	158,747	1 1
1888	1,781	100,128	230,294	2
1889	482	18,430	42,389	2
1890	686	66,160	113,795	1 1
1891	703	44,348	89,139	2
1892	896	80,062	148,115	1 1
1893	1,019	91,964	175,115	1 1
1894	699	42,973	86,125	2
1895	485	19,990	57,008	2
1896	325	11,214	25,751	2
1897	423	21,821	37,717	1 1
Total	62,557	9,244,378	10,599,244	1

figures show that the struggle between selector and squatter begin in earnest until about the year 1873, when the effects of lation of 1861 were felt in an acute form ; but during the ten at followed, this process of defence was applied in a wholesale by the pastoral tenants to save their possessions from encroach- rough the operations of the selectors. The system was modified legislation of 1884, the object of auction sales of country lands ng to obtain revenue by the sale of select parcels of land at a verage price and in much smaller average areas. Since the year ed, this system of alienation has ceased to be of use in con ng large pastoral estates.

ng other means offered for the unconditional purchase of Crown that of selection at the upset price of lots not bid for at auction ppeared with the passing of the Act of 1884. The following hows the results of this system of purchase during the period o 1883, when it was in operation :—

r.	Lots.	Total Area selected.	Year.	Lots.	Total Area selected.
	No.	acres.		No.	acres.
2	477	22,347	1874	1,112	98,850
3	362	17,384	1875	1,343	101,718
4	248	12,388	1876	1,126	95,681
5	251	12,582	1877	1,364	158,844
6	332	16,413	1878	893	122,812
7	270	15,803	1879	....	....
8	283	18,589	1880	182	39,408
9	545	39,085	1881	1,605	328,203
0	367	23,375	1882	2,240	353,093
1	340	23,700	1883	209	31,381
2	929	83,733	Total......	15,750	1,716,976
3	1,272	101,587			

a comparison of the above figures with those shown in the ng table, it will be seen that during the years 1881 and 1882 this unconditional purchase was largely availed of to supplement the urchases at auction.

The lands claimed in virtue of a pre-emptive right, a form of tion which was also abolished by the Crown Lands Act o added the following quota to the areas bought in the interests pastoralists :—

Year.	Lots.	Total Area sold.	Year.	Lots.	Total A
	No.	acres.		No.	ac
1862	117	30,619	1874	....	....
1863	217	58,032	1875	....	....
1864	47	13,128	1876	780	189,
1865	75	23,459	1877	367	81,
1866	76	25,616	1878	15	4,
1867	78	30,039	1879	25	6,
1868	139	52,260	1880	30	6,
1869	18	7,617	1881	35	7,
1870	9	3,718	1882	29	5,
1871	21	8,623	1883	23	2,
1872	9	3,379			
1873	4	1,488	Total......	2,114	560,

An examination of the figures in the tables just given shov during the ten years from 1873 to 1882 the area alienated prin with the object of consolidating pastoral properties, and of s them against the operations of conditional purchasers, amour 11,189,082 acres, made up as follows :—

Year.	By Auction Sales (Country Lots.)	Unconditionally sold by Selection.	Improved Lots sold to Owners of Improvements.	Sold by Pre-emption.	T
	acres.	acres.	acres.	acres.	a
1873	274,581	101,587	10,587	1,488	
1874	580,753	98,850	20,546	....	
1875	978,377	101,718	49,852	....	1,1
1876	1,685,650	95,681	86,099	189,664	2,
1877	1,829,613	158,844	159,848	81,193	2,
1878	861,049	122,812	224,841	4,063	1,
1879	353,372	....	121,062	6,033	
1880	346,679	39,408	237,646	6,912	
1881	523,657	328,203	474,099	7,461	1,
1882	503,547	353,093	165,031	5,183	1,
Total...	7,937,278	1,400,196	1,549,611	301,997	11,

The consolidation of pastoral estates did not suffer a seriou when the clauses of the Act of 1861, above cited, ceased to op the transfer of conditional purchases supplied fresh means by the absorption of a very large number of selections, principally in the and Western Divisions.

nparison of the areas dealt with in the following table shows how original conditional purchasers of Crown lands are dispossessing ves of their holdings, whilst the area selected does not exhibit a y to increase at anything like the same rate. An examination of le reveals the fact that since 1882 there have been 32,037,666 conditional purchases transferred, as against 15,343,707 acres for—a difference of 16,693,959 acres, which have to a very large gone to increase the large estates, distinctly to the detriment of settlement.

ear.	Selections.		Transfers.	
	Number.	Acreage.	Number.	Acreage.
1882	14,607	2,392,220	8,665	2,134,319
1883	10,725	1,621,948	6,213	1,508,583
1884	10,657	1,453,937	6,017	1,525,456
1885	5,372	1,114,871	9,079	2,286,730
1886	6,061	954,560	7,154	1,861,877
1887	4,478	723,151	7,440	2,159,429
1888	5,364	862,716	10,469	3,096,051
1889	4,686	740,964	10,741	2,327,562
1890	8,526	1,713,577	13,492	1,863,508
1891	6,149	1,306,534	16,727	2,333.808
1892	4,396	816,399	14,017	2,060,130
1893	3,393	533,805	12,581	1,825,097
1894	2,617	414,355	11,235	1,617,263
1895	1,751	253,431	11,517	1,785,011
1896	1,279	199,450	11,264	1,777,783
1897	1,306	241,789	11,896	1,875,059
al…………	91,367	15,343,707	168,507	32,037,666

ust be remembered, however, that a proportion of these transfers de by way of mortgage, and therefore it is not possible to ascertain a absolutely transferred by the original selectors. But if to the rted with by its owners since 1882 be added the extent of land rred during the previous twenty years, the fact that 20,575,336 it of the total area alienated are now contained in 674 holdings, o each one an average domain of 30,527 acres, is easily accounted he number of holdings, however, does not represent the number ers interested, as in not a few cases these large estates are held nership by three or four persons, or by companies and financial tions.

RURAL SETTLEMENT.

EXCLUDING land held by the tenants of the Crown, there New South Wales, at the end of March, 1898, 65,298 hold 1 acre and upwards in extent. Twenty years previously such h numbered 37,887. The number increased during the period by c per cent., while the area comprised in the holdings advance 21,471,596 acres to 43,518,921 acres, the increase representing 1 cent. The average area of alienated holdings gradually rose fr acres in 1879 to 770 acres in 1883; between 1884 and 18 average increased very little; while in 1893 the figures took a ward movement, falling to 666 acres in 1898—the lowest averag 1881. This decline in the average area is due to the increase number of small holdings, the advance in this respect havin pronounced since 1872. The following table gives the annual for the last twenty years :—

Year ended 31 March.	Average size of Holding.	Year ended 31 March.	Average size of Holding.
	acres.		acres.
1879	567	1889	795
1880	569	1890	787
1881	691	1891	780
1882	753	1892	784
1883	770	1893	750
1884	770	1894	748
1885	762	1895	707
1886	778	1896	699
1887	780	1897	688
1888	778	1898	666

The increase shown between the first and last years of th series is 99 acres, so that the average extent of holdings is over cent. larger than in 1879. For the first ten years of the pe increase was over 40 per cent. This was attributable mainly large area transferred to the larger estates by private purch to the acquisitions by auction sale and improvement purch influence of which has not been so marked since 1884.

mparing the existing rural holdings of various sizes with those e year 1880, it will be found that estates under 16 acres in extent increased 205 per cent., while those from 16 to 200 acres in extent advanced only 33 per cent. Between 201 and 400 acres in area number of holdings shows an increase of 40 per cent.; those from to 1,000 acres in area increased 53 per cent.; from 1,001 to 2,000 s, 117 per cent.; from 2,001 to 10,000 acres, 124 per cent.; while he largest class of holdings, those from 10,001 acres upwards, the ease in number has been 106 per cent. during the eighteen years. subjoined table shows the number of holdings in different classes at ious terms of the period named :—

Area.	Year ended 31st March.				
	1880.	1885.	1890.	1895.	1898.
der 16 acres	4,974	5,409	7,290	12,301	15,179
to 200 acres	21,302	20,998	22,048	25,707	28,404
to 400 acres	6,199	6,363	6,774	8,299	8,679
to 1,000 acres.........	4,964	6,497	6,849	7,569	7,623
1 to 2,000 acres	1,212	1,886	2,191	2,475	2,631
01 to 10,000 acres ...	940	1,413	3,910	2,013	2,108
001 and upwards......	327	513	658	656	674
Total	39,918	43,079	49,720	59,020	65,298

The holdings under 16 acres in extent are, generally speaking, in the nity of towns, and consist mainly of gardens or orchards, and the ease of 205 per cent. is what would naturally be expected from growing demand for their produce by a large urban population. least satisfactory feature in the table is the fact that the number oldings of moderate size does not greatly increase. In 1880 the lings having an area from 16 to 400 acres numbered 27,501, while 1898 they numbered 37,083, showing an advance of only 35 per . On the other hand, the larger holdings have increased at more twice that rate: in April, 1898, there were 13,036 holdings of 401 s and upwards in extent, compared with 7,443 in 1880, or an increase 5 per cent. in number during that short period. The area of hold-, as returned by occupiers, in every fifth year since 1880, and in 8, is given below :—

Year ended 31st March.	Total Area of Holdings.
	acres.
1880	22,721,603
1885	32,843,317
1890	37,497,889
1895	41,736,073
1898	43,518,921

The area of unenclosed land in 1879 amounted to between one-fourt and one-fifth of the total extent of the holdings; but in the beginni of 1898 the proportion had fallen to nearly one-twenty-sixth, the ar unenclosed at that period being only 1,702,903 acres out of a total o 43,518,921 acres occupied. This result is due partly to the operatio of legislation, and partly to the saving of labour which fencing enabl occupiers to effect.

METROPOLITAN DISTRICT.

For the purpose of an examination of the statistics showing th present state of the settlement of alienated land in New South Wales, it will be better to extend the inquiry successively to th various parts of the colony, as far as possible, in the order in which they were opened up, following the march of colonisation, in each the four zones of settlement into which the country may be said to geographically divided, viz., the coast, the tableland, the western sl of the Great Dividing Range, and the western plains. Each zo having its own special character, offers to the settler different nat resources according to its climatic conditions. Proceeding from metropolis as a centre, settlement extended first along the coa then to the central and more readily accessible parts of the tablela following afterwards the course of the great inland rivers towards th southern and western parts of the colony; thence to the great plains the west, spreading slowly across the River Darling to the confines the territory. Nature assisted by legislation contributed to the shaping of settlement into its present form—the natural course of events, however, being at times interrupted by sudden rushes of population to points scattered over the surface of the country, even to its remotest extremities.

That part of the county of Cumberland which embraces the ar of the metropolis and its suburbs is outside the limits of this examination, as it is not intended to inquire into the present condition of urba settlement; but it may be stated, nevertheless, that as regards th subdivision and the distribution of landed property in the city an suburbs of Sydney there is now little difference between this an much older communities. The figures given below refer only to rura settlement in the remaining portion of this county, where the fi attempts to colonize were made. It will be seen from the table, i which these holdings are distributed into series of various areas, th there are five distinct classes of holders of alienated land, viz.:— (1) Persons who occupy their own freeholds; (2) persons occupyin holdings which they rent from the freeholders; (3) owners of land wh rent from other private owners lands which they work in additio to their own freeholds; (4) persons who, in addition to their freehold, rent from the Crown areas which are generally devoted to th l state of rural settlement in the district comprising the Hunter Hawkesbury Valleys:—

unties.	Occupiers of—							Area alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Freehold with Crown lands attached.	Private Rented with Crown lands attached.	Partly Freehold, partly Private Rented, and partly Crown lands.	Total	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	No.	No.	acres.	acres.	acres.
am	672	729	139	183	7	24	1,754	623,983	215,493	839,476
er	141	57	24	30	2	7	261	111,877	22,180	134,057
humberland	1,670	1,115	249	42	2	10	3,088	367,244	182,595	549,839
k	921	189	102	51	4	16	1,283	144,405	35,944	180,349
Total	3,404	2,090	514	306	15	57	6,386	1,247,509	456,212	1,703,721

This division contains a total area of 5,310,080 acres, of which 03,721 acres, or 32·08 per cent., are alienated among 6,386 landders, so that the average area of holdings in this part of the ony is 267 acres. Of the area thus alienated, 1,247,509 acres, or 22 per cent., are in the occupancy of the owners of the land; and 6,212 acres, or 26·78 per cent., are occupied by private tenants. In the ming counties of Durham and Northumberland the proportion of land d by freeholders is considerable, amounting respectively to 74·33 and 72 per cent. of the total area alienated in the counties, and together 58 per cent. of the total area alienated in the whole division. It l be seen on reference to the table that the proportion of land held tenant occupiers is small compared with the total alienated area, only 78 per cent. being leasehold, of which 12·65 and 10·72 per cent. are Durham and Northumberland respectively, while the rented portions Hunter and Cook together only amount to 3·41 per cent.

The total number of occupiers is returned at 6,386 for the whole trict. Of these, 3,404 occupy their own freeholds; 2,090 are private ants; 514 rent various private areas in addition to their own land; occupy, together with their freeholds, a certain area of Crown lands lease; 15 occupy holdings a portion of which consists of private ted land and the other portion of Crown land; and 57 stand in the ition of being the possessors of freehold, with both private rented d and Crown lands attached. As before stated, the average area of dings in this district is 267 acres, with a minimum of 140 acres in county of Cook, and a maximum of 513 acres in that of Hunter. rham comes next with 478 acres per holding; and the area is much er in Northumberland, which has an average of 178 acres per holding. area of alienated land enclosed is 1,540,971 acres; and unenclosed, ,750 acres. There are 71,015 acres in cultivation—40,072 acres of d occupied by the owners, and 30,943 acres of private rented land.

The classification of the holdings in this division will be found b
The average area of the large estates in the last series is 22,303 acr

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivat	
		Total.	Proportion to Total Area alienated in District.	Total.	Prop to A Hol
	No.	acres.	per cent.	acres.	per
1 to 30 acres	2,304	25,111	1·47	10,630	42
31 to 400 acres	3,378	402,437	23·62	46,929	11
401 to 1,000 acres	426	267,482	15·70	7,239	2
1,001 to 10,000 acres	265	718,754	42·19	5,674	0
10,001 acres and upwards	13	289,937	17·02	543	0
Total	6,386	1,703,721	100·00	71,015	4

The area of Crown lands occupied in this district is 294,284 a held by 432 lessees, 378 of whom have also alienated land. Of area, 120,571 acres are held under conditional lease, and 173,713 under other forms of lease. The area enclosed is 194,430 acres; unenclosed, 99,854 acres. Only 292 acres of Crown lands are cultiv chiefly in the county of Cook. The value of improvements is retu at £61,290, or an average of about 4s. 2d. per acre occupied.

The area of alienated land in holdings over 1 acre in extent an Crown lands in occupation is 1,998,005 acres; and deducting from the area cultivated—71,307 acres—there remains an area of 1,92 acres used for grazing and dairying. The total area of the dis embraced in this division being 5,310,080 acres, there remain unalien and unoccupied about 3,278,000 acres of Crown lands, making allow for small holdings under 1 acre not included in the figures given a

SOUTH COAST DISTRICT.

In the earlier portion of the present century colonisation to southerly direction from the metropolis, and settlement extended ra along the lower valleys of the rivers of the South Coast, where the lands were alienated in grants of large areas to a few families. I on, however, the nature of the country and a more intelligent appr sion of the principles which should guide colonisation brought abou subdivision of these large estates into numerous and comparat small holdings, which are at present cultivated by a fairly prosp tenantry. This is especially the case in the county of Camden. average area of estates in Auckland and Dampier, owing to their dis from the metropolis, and perhaps also to the mountainous characte considerable portion of the land within their boundaries, reaches 59 325 acres respectively; but as the metropolis is approached the av area of the holdings decreases to 236 acres in St. Vincent and 165 in Camden, the average for the whole district being 223 acres per hol the South Coast district alienated rural lands are occupied in the r illustrated in the following table :—

ntics.	Occupiers of—							Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Freehold with Crown lands attached.	Private Rented with Crown lands attached.	Partly Freehold, partly Private Rented, and partly Crown lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	No.	No.	acres.	acres.	acres.
....	1,809	1,501	443	76	6	20	3,855	396,162	241,600	637,762
ent ...	716	351	183	124	8	35	1,307	222,449	99,540	321,989
r	370	113	32	75	1	5	596	157,184	36,605	193,789
d	547	183	99	70	8	10	917	291,232	57,390	348,622
tal	3,442	2,148	707	345	23	70	6,735	1,067,027	435,135	1,502,162

e area of alienated land is shown to be 1,502,162 acres, or 28·85 ent. of the total area—5,205,120 acres—of this portion of the ; the extent of land occupied by the proprietors themselves 1,067,027 acres, or 71·03 per cent. ; and of that leased to tenant iers, 435,135 acres, or 28·97 per cent. of the area alienated. There together in these counties 3,442 occupiers of their own freeholds, tenants of private rented lands, 707 persons occupying both their and leased private lands, 345 occupiers of freehold with Crown attached, 23 persons occupying private rented lands with Crown attached, and 70 persons whose holdings are partly their own, leased from private owners, and partly belonging to the Crown— d of 6,735 occupiers. The area of alienated land enclosed is ,912 acres, leaving 141,250 acres unenclosed. The area in cultiva- s 52,536 acres, of which 31,745 acres represent land occupied by wners, and 20,791 acres land held under private tenancy.

holdings in this division may be classified as under. The average f large estates over 10,000 acres in extent is 14,372 acres :—

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area under Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
acres	1,857	14,752	0·98	2,313	15·67
00 acres	4,064	602,083	40·08	35,495	5·90
1,000 acres............	602	365,993	24·36	8,784	2·40
o 10,000 acres	205	418,733	27·88	5,513	1·32
acres and upwards..	7	100,601	6·70	431	0·42
Total	6,735	1,502,162	100·00	52,536	3·49

From the foregoing a fairly clear idea may be obtained of the state of rural settlement in the valleys of the coastal rivers, an country extending from the sea to the first slopes of the Great D Range. Geographical features and climate are the main ele determining the occupation of the soil, irrespective of admi boundaries. In this part of the colony the settlement of the lands has proceeded in a way very different from that of the ta which extends from north to south, and divides the rich agr valleys of the coastal rivers and their broken mountainous w from the immense plains of the western district.

CENTRAL TABLELAND.

After the difficulties between the coast and the interior h overcome, the pioneers of colonisation penetrated to the centr land, thence extending to the south and the north, and aft gradually spreading over the whole of the great western inter first they followed the course of the great rivers, and occupi by little, all the available land, until at the present time on inferior country remains untenanted.

The central tableland, comprising the counties grouped aro cities of Bathurst, Orange, and Mudgee, was the first settled, a occupation of the alienated lands at the present time is illustr the figures given in the following table :—

Counties.	Occupiers of—							Area alien	
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Freehold with Crown lands attached.	Private Rented with Crown lands attached.	Partly Freehold, partly Private Rented, and partly Crown lands.	Total.	Freehold.	Private Rented.
	No.	No.	No.	No.	No.	No.	No.	acres.	acres.
Brisbane	479	113	59	219	3	27	900	786,858	39,579
Phillip..............	400	141	31	183	12	24	791	266,643	[illegible]
Bligh	125	20	11	271	3	22	452	450,735	[illegible]
Lincoln	209	68	32	191	2	8	510	215,819	21,219
Gordon	193	38	14	187	1	9	442	339,096	15,096
Wellington	595	209	64	263	7	25	1,163	231,222	[illegible]
Roxburgh	382	166	57	160	13	25	803	202,187	104,568
Ashburnham.....	997	128	46	247	8	21	1,447	609,131	32,618
Bathurst	779	634	151	144	15	45	1,768	617,762	171,697
Westmoreland ..	224	99	37	233	13	38	644	173,207	[illegible]
Total	4,383	1,616	502	2,098	77	244	8,920	3,902,656	[illegible]

From the foregoing table it will be seen that the number of of rural lands in this part of the colony is 8,920, of whom 4,38 their own freeholds; 1,616 are private tenants; 502 lease lan private owners in addition to their own freeholds; 2,098 person areas of Crown lands, generally for grazing purposes, in addition

holds ; 77 rent both private and Crown lands ; and 244 are tenants
rivate parties and the Crown, as well as possessing land of their
he area alienated is 4,569,228 acres, representing 39·22 per cent.
hole area of the district, which is computed at 11,649,280 acres.
ortion of land occupied by the landowners themselves is 87·38
., or 3,992,650 acres ; whilst 576,578 acres are leased to tenant
s. In the county of Roxburgh the proportion of land leased
lerable, 104,565 acres out of 306,752 acres alienated in this
or 34·09 per cent., being held by tenants ; and in Westmoreland
hurst, 44,804 acres and 171,697 acres respectively, or 20·55
5 per cent., are held in the same manner. The proportion in
aining counties gradually diminishes from 10·94 per cent. in
d 10·28 per cent. in Wellington to 7·03 per cent. in Brisbane
1 per cent. in Gordon, where the country is less thickly settled,
cupied principally for grazing purposes. On the central tableland
ated some of the finest freehold estates in New South Wales, the
ving remained in the hands of the original grantees or their
nts, who consolidated their holdings by taking advantage on a
le of the auction sale and improvement clauses of the Land
861.

verage area of holdings in this division is 512 acres, ranging
maximum of 1,119 acres in Bligh, and 940 acres in Brisbane,
o the cause just mentioned, to a minimum of 338 acres in
reland, and 317 acres in Wellington. The total area of alienated
losed is 4,507,209 acres, or 98·62 per cent., the area unenclosed
ly 62,019 acres. The area cultivated is 317,395 acres--235,076
ing land worked by the owners, and 82,319 acres by tenants.
oldings in this division may be classified as under. The average
arge estates over 10,000 acres in extent is 22,884 acres :--

of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
res	1,887	14,232	0·31	5,552	39·01
acres	5,211	853,979	18·69	158,850	18·60
00 acres..	1,186	741,258	16·22	82,056	11·07
0,000 acres	571	1,472,281	32·22	60,549	4·07
res and upwards	65	1,487,478	32·56	10,388	0·69
Total	8,920	4,569,228	100·00	317,395	6·94

rea of Crown lands occupied on the central tableland is 3,969,443
f which 1,404,449 acres are held under conditional lease, and
res under settlement lease. There are 3,538,534 acres enclosed,

and 430,909 acres unenclosed. The number of lessees is 2,675, of 2,419 occupy Crown lands in addition to alienated holdings, a occupy Crown lands only. The area cultivated is 5,112 acres, a value of improvements is returned at £516,006—an average of 2s. 7d. per acre occupied.

The area of alienated land and Crown lands occupied is 8,5 acres; and deducting from this the area in cultivation—322,507 a there remain 8,216,164 acres used for grazing and dairying an purposes. The total area of the counties comprised in the c being 11,649,280 acres, the area neither alienated nor occupied, al for alienated holdings under 1 acre in extent, which are not in in the foregoing figures, will be about 2,950,000 acres.

SOUTHERN TABLELAND.

The conditions of settlement in the southern tableland do not differ from those which obtain in the central district, the pri feature being the greater proportion of holdings occupied by the prietors. The following table illustrates the state of settlement various counties which comprise this portion of the colony:—

Counties.	Occupiers of—							Area Alienated	
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Freehold with Crown Lands attached	Private Rented, with Crown Lands attached.	Partly Freehold, partly Private Rented, and partly Crown Lands.	Total.	Freehold.	Private Rented.
	No.	No.	No.	No.	No.	No.	No.	acres.	acres.
Forbes	302	31	17	135	3	2	490	407,014	23,317
Monteagle	598	56	32	112	3	15	816	513,363	17,630
Harden	617	113	66	103	2	10	911	780,502	60,028
King	514	115	63	330	10	32	1,064	550,567	59,902
Georgiana	246	89	31	236	8	52	662	272,932	75,046
Argyle.........	600	281	134	193	15	54	1,277	463,008	170,631
Murray	441	149	88	197	8	51	934	757,333	134,449
Cowley	28	6	7	61	..	8	110	104,282	23,195
Buccleuch	108	100	10	87	..	6	311	187,178	9,712
Clarendon	354	146	57	42	1	5	605	574,408	58,834
Wynyard	558	189	64	111	1	21	944	564,902	53,569
Goulburn	322	60	33	71	2	10	498	500,000	49,800
Selwyn	120	11	7	59	3	10	210	196,732	11,649
Wallace	147	34	11	212	4	16	424	405,747	16,609
Beresford	189	52	15	134	4	14	408	399,487	11,745
Wellesley	276	60	30	129	4	13	512	452,656	29,621
Total	5,420	1,492	665	2,212	68	319	10,176	7,169,118	805,737

Thus the land alienated in this part of the colony comprises 7,9 acres, or 47·60 per cent. of the whole of its area, which c 16,755,200 acres. Of this extent of land, only 805,737 acres, or per cent. of the settled lands, are held in tenancy; whilst 7,1 acres, or 89·90 per cent., are occupied by the landowners them

entage of land held in tenancy is greatest in the counties of
nd Georgiana, where it is 26·94 and 21·70 respectively. There
0 per cent. in Cowley county, 15·07 in Murray, 9·81 in
29 in Clarendon, 8·81 in Goulburn, and 8·66 in Wynyard. In
counties the proportion dwindles from 7·14 per cent. in Harden
imum of 2·86 per cent. in the southern county of Beresford.
whole of this district the total number of occupiers is 10,176, of
420 occupy their own freeholds; 1,492 are private tenants; 665
oth descriptions of alienated lands; 2,212 occupy areas of Crown
addition to their freeholds; 68 occupy private rented lands
own lands attached; and 319 persons who possess freeholds
t land from private owners and from the Crown. The
is of settlement in which pastoral occupation is the leading
must necessarily greatly affect the average extent of rural
, and in this division it will be found to attain fairly high
ons, 783 acres being the average throughout, with a maximum
acres in Cowley, and a minimum of 496 acres in Argyle.
of alienated land enclosed is 7,880,235 acres; and unenclosed,
acres. The total extent in cultivation is 333,766 acres, viz.,
acres worked by owners, and 65,568 acres by tenants. This
in proportion to the area of the district; but it is on the large
f the southern tableland that there has been the most notable
in cultivation. The area cultivated on estates over 10,000
extent, viz., 38,265 acres, is 231 per cent higher than that of
s ago, when it stood at 11,542 acres. The advance has taken
every county in the district, but the county of Monteagle
n increase in the area cultivated on these large holdings from
res in the year 1892-3 to 3,866 acres in 1893-4, 11,059 acres
5, 11,616 acres in 1895-6, and 17,655 acres in 1896-7. The
, however, reduced to 15,358 acres in 1897-8. The average
large estates over 10,000 acres in extent is 21,280 acres. The
in this division may be classified as under:—

of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
res	2,015	16,959	0·21	5,400	31·84
acres	5,327	864,656	10·84	102,796	11·89
00 acres.........	1,509	974,088	12·21	81,880	8·41
10,000 acres ...	1,191	3,267,646	40·98	105,425	3·23
res and upwards	134	2,851,506	35·76	38,265	1·34
Total..............	10,176	7,974,855	100·00	333,766	4·18

area of Crown lands occupied in the counties of the southern
d is 4,651,066 acres, of which there are under conditional

lease 1,472,674 acres. The area enclosed is 3,207,826 acres unenclosed 1,443,240 acres. The total number of lessees is 2,8 whom 2,599 hold alienated lands also, and 276 occupy Crown lands The area cultivated on Crown lands is very small—only 1,340 The value of improvements is returned at £491,009, or an aver about 2s. 1d. per acre occupied.

The area of alienated land and Crown land occupied is 12,62 acres, and deducting the area cultivated, 335,106 acres, there r 12,290,815 acres devoted to grazing and dairying. The total ar the district is 16,755,200 acres, and making allowance for alie holdings under 1 acre in extent, which are not included in the fore there are left neither alienated nor occupied about 3,955,000 which, of course, include land that is of no practical use.

NORTHERN TABLELAND.

In the northern tableland the disproportion between freeholders tenants is strongly marked, the latter forming a very small min of the occupiers of alienated lands, owing to the same causes operate both in the south and in the centre of this great section colony. It is evident that the object of the Land Act of 18 create a class of independent settlers has been fairly successful, withstanding the fact that the number of actual occupiers is small pared with that of the individual selectors who, since the year have applied for conditional purchases. The following figures illu the state of settlement in the part of the country in question :—

Counties.	Occupiers of—							Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Freehold with Crown Lands attached.	Private Rented with Crown Lands attached.	Partly Freehold, partly Private Rented, and partly Crown Lands.	Total.	Freehold.	Private Rented.	
	No.	No.	No.	No.	No.	No.	No.	acres.	acres.	
Parry	212	78	22	125	1	8	446	487,523	15,362	
Buckland	302	42	25	81	3	10	463	704,261	11,619	
Vernon	119	40	11	108	3	6	287	305,884	16,178	
Inglis	169	37	10	125	1	18	360	163,327	26,780	
Darling	94	53	12	220	1	18	398	301,777	24,465	
Sandon	583	127	34	116	3	5	868	458,621	20,069	
Clarke	53	10	3	120	5	3	194	157,045	6,160	
Hardinge	91	25	26	180	2	8	332	283,055	30,985	
Clive	351	37	41	113	1	1	544	132,844	2,311	
Hawes	5	2	..	80	..	3	90	97,970	1,085	
Gresham	9	.	1	8	1	.	19	19,396	80	
Gough	437	156	45	181	4	13	836	514,419	31,338	
Arawatta	119	17	15	104	..	5	260	243,902	13,938	
Drake	13	9	1	22	..	..	45	115,773	451	
Buller	63	9	1	79	4	3	159	45,311	3,782	
Total	2,620	642	247	1,662	29	101	5,301	4,031,108	212,126	4

otal area alienated in this district is 4,244,324 acres, or 28·69 . of the whole extent of 14,643,200 acres. The total number iers of rural settled lands is 5,301, of whom 2,620 live on their s: 642 are tenants of private lands; 247 rent private lands ion to possessing freehold land; 1,662 occupy Crown lands in to their freeholds; 29 occupy private rented lands with Crown tached; and 101 persons who possess freeholds are also tenants of wn and of private landowners. The proportion of the area l by private tenants is 213,126 acres, or 5·02 per cent. of the xtent of alienated land; whilst 94·98 per cent., representing 8 acres, is occupied by the landowners themselves. The land both for agricultural and pastoral purposes, and these industries rally carried on conjointly. The average area of holdings in rict is 800 acres, ranging from 248 acres per holding in Clive to res in Drake. The average in the county of Buckland is 1,546 ut in the districts surrounding the towns of Glen Innes and a large decrease is experienced, the average area of the holdings ly 652 and 946 acres in Gough and Hardinge respectively. of alienated land enclosed is 4,066,310 acres; and unenclosed, acres. There are 132,445 acres cultivated—that is, about 3·12 . of the alienated area—112,525 acres being land tilled by the rs, and 19,920 by tenants. The holdings in this division may fied as under:—

f Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area Alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
res	1,004	7,766	0·18	3,427	44·13
acres	3,058	506,198	11·93	69,860	13·80
00 acres	729	466,801	11·00	31,125	6·66
0,000 acres ...	430	1,114,794	26·26	22,872	1·96
es and upwards	80	2,148,765	50·63	5,161	0·24
Total	5,301	4,244,324	100·00	132,445	3·12

The average area of the large estates over 10,000 acres in ex the northern tableland, is 26,859 acres.

There are 7,015,054 acres of Crown lands occupied in this 1,960,952 acres of which are held under conditional lease, an acres under settlement lease. The area of Crown lands en 4,278,481 acres; and unenclosed, 2,736,573 acres. The value of i ments is returned at £501,793—an average of nearly 1s. 5d. occupied, the unenclosed area being very large. Only a very sm 1,121 acres, is under cultivation. The total area of alienated la Crown lands held under lease is 11,259,378 acres, and deducti this the area cultivated—133,566 acres—it will be seen that devoted to grazing and dairying is 11,125,812 acres. The total the district is 14,643,200 acres, and making allowance for aliena in holdings under an acre in extent, which are not included in going, there remains neither alienated nor under occupation an about 3,250,000 acres.

SOUTH-WESTERN SLOPE.

The districts situated on the western slope of the Great Range mark the transition between the agricultural settlement coast and tableland and the purely pastoral settlements of t western region. The extent of arable land in the division is v siderable, but in proportion to the total area of holdings little is to cultivation, as it is more advantageous at present to use the grazing purposes, the great distance to the markets being the obstacle to a rapid expansion of agriculture on the tableland withstanding this, however, a considerable impetus has been agriculture during the last three years, some of the most increases having taken place in this district.

It will be noticed that the proportion of land alienated cons diminishes as the districts on the western slope are reached, e those parts where the excellence of the land for grazing purpo even for agriculture, impelled the pastoral tenants of the Cro years ago to secure their holdings from the incursions of selector—whom the Act ostensibly intended to favour—by n systematic purchases under the auction sale and improvement of the Land Act of 1861. In the south-western districts, wl traversed by the principal permanent rivers of western Ne Wales, the land has been alienated in a wholesale fashion, mense areas of freehold land are in the hands of a very small of landholders; while in the north-western districts the freehol are neither so numerous nor of such an enormous extent as the south. The state of settlement in the counties situat ern part of the western slope of the Great Dividing Range may thered from the following figures:—

nties.	Occupiers of—							Area Alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Freehold with Crown Lands attached.	Private Rented with Crown Lands attached.	Partly Freehold, partly Private Rented, and partly Crown Lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	No.	No.	acres.	acres.	acres.
g	19	1	..	48	1	3	72	118,312	4,092	122,404
....	29	6	1	158	1	6	201	453,454	18,729	472,183
....	379	46	18	205	6	15	669	733,126	46,415	779,541
... .	414	90	10	105	2	5	635	599,421	46,157	645,578
. .....	105	47	5	72	1	2	232	702,875	22,093	724,968
on	53	18	1	56	4	..	132	336,338	6,772	343,110
....	20	1	..	19	1	1	42	567,055	2,427	569,482
gery . .	72	24	4	63	1	7	171	926,996	16,219	943,215
. ...	53	1	4	6	..	..	64	662,763	5,187	667,950
ll	196	49	22	38	..	5	310	640,068	30,892	670,960
....	316	25	16	42	1	2	402	1,526,074	23,511	1,549,585
nd	161	35	21	35	1	4	257	1,598,042	21,274	1,619,316
l	83	2	4	79	1	4	173	1,154,455	12,389	1,166,844
....	147	23	19	6	..	..	195	472,839	10,078	482,917
n	230	191	20	14	1	3	468	584,417	93,217	677,634
....	384	48	26	28	..	2	486	895,339	25,592	920,931
tal	2,661	607	189	972	21	59	4,509	11,971,574	385,044	12,356,618

e total area of this district, commonly called Riverina, is computed ,273,360 acres, of which 12,356,618 acres are now alienated, or per cent. of the whole area. In some of the counties, however, a er proportion of the land has been parted with; thus in Hume, per cent. is alienated, or 920,931 acres out of a total of 1,064,960 . This county is closely followed by Denison with 85·94 per cent., 77,634 acres out of 788,480 acres; Mitchell, with 81·27 per , or 670,960 acres out of 825,600 acres; Urana, with 77·52 per , or 1,549,585 acres out of 1,999,080 acres; Cadell, with 72·34 ent., or 482,917 acres out of 667,520 acres; Townsend, with 69·35 ent., or 1,619,316 acres out of 2,335,080 acres; Boyd, with 66·99 ent., or 667,950 acres out of 1,001,600 acres; Wakool, with 61·39 ent., or 1,166,844 acres out of 1,900,800 acres; and Sturt, with 5 per cent., or 569,482 acres out of 967,680 acres. The counties aradgery, Bland, Bourke, and Cooper have respectively 52·84 per , 49·76 per cent., 43·85 per cent., and 41·16 per cent. of their areas alienated, while in Gipps 30·14 per cent. is alienated; but e county of Nicholson the percentage is only 24·30, and in Dowling 10·39. The percentage of land held by tenants is very small, ing from 0·43 per cent. in Sturt to 13·75 in Denison, the percentage he whole district being only 3·12.

The number of holders of rural lands in the Riverina district 4,509, of whom 2,661 occupy their own freeholds; only 607 private tenants alone; 189 rent private lands in addition to their fr holds; 972 persons occupy areas of Crown lands, generally for gra purposes, in addition to their own freeholds; 21 persons occupy priv rented lands with Crown lands attached; and 59 persons who po freeholds also rent land from the Crown and from private owners.

As might be expected, the average area of holdings is high in th districts, where the auction and improvement clauses of the Crown La Act of 1861 were extensively brought into operation for the purp of consolidating holdings and preventing the land from falling into t hands of the free selectors, whom the great pastoral lessees did not l upon as desirable neighbours. The land was, indeed, bought up wh sale, the pastoralists being greatly helped by the various ban corporations, and their joint operations resulted in the aliena of immense areas of the best pastoral land in the colony. T average area of holdings for the whole district is 2,740 acres; in the county of Sturt it reaches 13,559 acres; in Boyd, 10,4 acres; in Wakool, 6,745 acres; in Townsend, 6,301 acres; and Waradgery, 5,516 acres, diminishing from 3,855 in Urana to 1,0 acres in Bourke.

Practically the whole of the alienated land in this district is closed, only 60,054 acres out of a total area of 12,356,618 ac being open. The area under cultivation is 605,915 acres, of whi 485,437 acres represent land worked by proprietors, while 120,47 acres are worked by tenants. The holdings in this division are th distributed :—

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivation.	
		Total.	Proportion to Total Area alienated in District.	Total.	Proportion to Area of Holdings.
	No.	acres.	per cent.	acres.	per cent.
1 to 30 acres	455	3,575	0·03	945	26·43
31 to 400 acres	1,723	375,826	3·04	114,387	30·44
401 to 1,000 acres.........	1,229	785,555	6·36	152,624	19·43
1,001 to 10,000 acres ..	908	2,325,342	18·82	218,422	9·39
10,001 acres and upwards	194	8,866,320	71·75	119,537	1·35
Total	4,509	12,356,618	100·00	605,915	4·90

The average area of estates over 10,000 acres in extent is 45,7 acres. The area cultivated on these large holdings is small i comparison with their total extent, but it is nevertheless near three times as much as it was five years ago, the same tendenc being observable in this district as has been referred to in the southe tableland.

total area of Crown lands occupied on the South-Western slope 12,970 acres, only 139,960 acres of which remain unfenced. The eld under conditional lease is 2,573,847 acres, and under settle- lease, 200,900 acres. In cultivation there are 12,562 acres, of 8,540 acres are in the counties of Bland, Nicholson, Bourke, and r. The value of improvements is returned at £1,114,592, or an e of about 2s. 11d. per acre. The number of lessees is 1,244, of 1,052 occupy Crown lands attached to alienated holdings, and ccupy Crown lands only.

area of alienated lands and Crown lands occupied is 19,899,588 and deducting from this the cultivated area—618,477 acres—the levoted to grazing and dairying is 19,281,111 acres. The total f the district is 22,273,360 acres; so that, allowing for alienation lings under 1 acre in area, there are not more than about 2,349,000 nalienated and unoccupied.

WESTERN-CENTRAL SLOPE.

condition of settlement in regard to the lands on the central ard slope is illustrated by the following table:—

ties.	Occupiers of—							Area alienated.		
	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Freehold with Crown Lands attached.	Private Rented with Crown Lands attached.	Partly Freehold, partly Private Rented, and partly Crown Lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	No.	No.	acres.	acres.	acres.
....	14	8	1	82	2	13	120	524,636	34,446	559,082
r	36	9	4	126	2	11	188	350,210	11,846	362,056
go	17	..	..	33	..	.	50	43,052	...	43,052
....	83	6	2	64	1	7	163	193,468	5,568	199,036
ne	157	21	5	103	1	3	290	210,322	15,369	225,691
....	3	..	..	58	..	1	62	69,725	640	70,365
r	15	1	..	105	2	4	127	163,802	3,407	167,209
ham	93	12	3	160	1	6	275	329,216	8,073	337,289
otal ...	418	57	15	731	9	45	1,275	1,884,431	79,349	1,963,780

total area alienated amounts to 1,963,780 acres, or 17·49 per of the total area of the district, which is estimated at 11,228,520

The greatest area alienated is in the county of Gregory, where are 559,082 acres, or 28·46 per cent. of the total area, held by rs. The percentage of alienated land in Ewenmar is 27·54; in , 23·44; in Cunningham, 22·00; in Narromine, 19·51 per cent., n Kennedy 11·40 per cent. has been parted with; but in Flinders roportion is only 4·55 per cent., and in Canbelego, 3·08 per cent. and is almost entirely devoted to pastoral pursuits, there being only 8 acres under cultivation, of which 32,396 acres, or 82·81 per cent., are in the counties of Narromine, Kennedy, and Cunningham. 1,784 acres are cultivated by tenants. Although the area occup tenants is proportionately larger than is the case farther south, the only 79,349 acres so held, the proprietors occupying 1,884,431 acr of the 1,963,780 acres of alienated land which the district contains. proportion held by tenants ranges from 6·81 per cent. in Narromin 6·16 per cent. in Gregory to 0·91 in Flinders, while there is no p rented land in Canbelego; the average for the whole district i per cent. The area of alienated land enclosed is 1,927,815 acre only 35,965 acres are unenclosed.

As a result of the small number of settlers in such an ext district, the average area of holdings is necessarily fairly large, alt it does not attain to such proportions as in the south, the average o division being 1,540 acres, with a maximum of 4,659 acres in Gr and a minimum of 861 acres in Canbelego.

The holdings in this division may be thus classified. The av area of large estates over 10,000 acres in extent is 26,785 acres:—

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultivat	
		Total.	Proportion to Total Area alienated in District.	Total.	Pro to of H
	No.	acres.	per cent.	acres.	per
1 to 30 acres	173	1,709	0·08	394	2
31 to 400 acres	374	72,694	3·70	6,691	[illegible]
401 to 1,000 acres	413	269,037	13·70	9,562	[illegible]
1,001 to 10,000 acres	281	709,633	36·14	16,681	[illegible]
10,001 acres and upwards	34	910,707	46·38	5,790	[illegible]
Total	1,275	1,963,780	100·00	39,118	1

The area of Crown lands occupied in this district is 8,065,869 of which 7,831,804 acres are enclosed. The area under conditional is 2,394,337 acres, and under settlement lease 197,557 acres; and are 96,757 acres under homestead lease in the county of Canb The area under cultivation is only 7,033 acres; and the val improvements on Crown lands is £1,116,951, or an average of 2s. 9d. per acre occupied. There are 920 lessees, of whom 785 als alienated estates, and 135 occupy Crown lands only.

The total area of alienated lands and Crown lands occup 10,029,649 acres, of which 9,983,498 acres are devoted to the pa and dairying industry. The total area embraced in the counties prising the Western-Central district is 11,228,520 acres, and m allowance for alienated estates under 1 acre in extent, which a included in the foregoing, there remains neither alienated nor lease an area of not more than 1,120,000 acres.

NORTH-WESTERN SLOPE.

northern portion of the western slope of the Dividing Range, ibution of settlement closely resembles that met with in the just examined, as the following table shows :—

	Occupiers of—							Area Alienated.		
s.	Freehold.	Private Rented.	Partly Freehold and partly Private Rented.	Freehold with Crown Lands attached.	Private Rented with Crown Lands attached.	Partly Freehold, partly Private Rented, and partly Crown Lands.	Total.	Freehold.	Private Rented.	Total.
	No.	No.	No.	No.	No.	No.	No.	acres.	acres.	acres.
......	14	3	3	73	1	5	90	207,610	6,393	214,003
....	70	12	5	105	1	9	202	398,638	7,712	406,350
.....	55	16	5	67	3	3	149	545,763	11,055	556,818
......	13	1	1	147	..	8	170	296,555	9,653	306,208
......	134	33	11	106	1	11	296	223,884	13,905	237,789
....	130	37	3	67	1	2	240	247,209	6,321	253,530
....	19	3	1	86	..	6	115	436,955	10,204	447,159
...	14	3	..	69	..	2	88	210,334	3,136	213,470
.....	43	13	3	167	..	4	230	566,364	15,059	581,423
....	49	15	4	75	3	1	147	131,066	6,144	137,210
......	65	7	1	14	1	5	93	30,962	4,333	35,295
..	231	22	1	127	2	9	392	857,637	12,125	869,762
.....	26	5	..	35	1	1	68	171,730	2,000	173,730
....	91	28	7	130	3	8	273	210,931	5,594	216,525
......	954	198	45	1,274	17	74	2,562	4,535,638	113,640	4,649,278

area alienated is 4,649,278 acres, or 24·26 per cent. of the total nich is 19,157,800 acres. The highest proportion of alienated land 'ottinger, around Gunnedah, where 869,762 acres, or 48·20 per the total area of the county, calculated at 1,804,120 acres, have enated, the greater portion to the pastoralists, who have succeeded enting the settlement of an agricultural class on the best portion famed Liverpool Plains. The competition between the pastoral- l the selectors was not so keen in the north-western district as in the central, and more particularly in the south-western ı, presumably because the land, though equally good in quality, listant from the markets, and the country is more exposed to e climatic influences in the northern parts. The average area ings throughout the district, though higher than in the central- ı district, is not so large as the average in the south-west, reaching cres, with a maximum of 3,888 acres in Jamison, owing to causes ed above, and a minimum of 379 acres in White. The district, ie exception of its eastern portion, abutting on the boundary of lcland of New England, is entirely devoted to the depasturing k. There are 334 tenant occupiers, renting 113,640 acres, the of the alienated area—4,535,638 acres—being occupied by 2,347 tors. The total number of holdings is 2,562, of which 954 are

The proportion of land alienated is only 2·18 per cent. of the tot
of this district, being an aggregate of 1,799,135 acres out of 82,7
acres which the division is estimated to contain. Of this area, 1,7
acres are in the occupancy of the landowners, and only 72,237 ac
held under private lease, this kind of tenure being principally me
in the counties of Caira, Cowper, Waljeers, Clyde, Franklin, and
The total number of holdings is 1,159, of which 542 are freehold
private rented properties; 24 partly freehold and partly private
hold; 432 freeholds to which considerable areas of Crown lan
attached; 18 private rented holdings with Crown lands attached
15 freeholds with both private rented and Crown lands attached.
average area of alienated holdings for the whole western divi
1,552 acres, the average in many counties, owing to the small n
of holdings, being very large. In Waljeers it reaches 12,686 acr
Mossgiel, 6,509 acres; in Manara, 5,623 acres; in Landsborough,
acres; in Franklin, 4,461 acres; in Caira, 4,118 acres; and in
3,896 acres. The average in Finch is 2,987 acres; in Kilfera,
acres: in Tara, 2,478 acres; in Windeyer, 2,153 acres; in Clyde,
acres; in Narran, 1,452 acres; in Killara, 1,362 acres; in Bla
1,301 acres; in Wentworth, 1,269 acres; in Yungnulgra, 1,121
and in Yanda, 1,090 acres. In Farnell it is 1,020 acres; dimin
in the other counties from 939 acres in Rankin to 120 acres in
while in Yancowinna (in the Broken Hill District) there ar
holdings averaging 54 acres each. There is one holding of 40 a
Barrona, one of 120 acres in Poole, and one of 360 acres in D
The land is used purely for pastoral purposes, except in the vici
townships, where market-gardening and fruit-growing are carri
principally by Chinese.

The area of alienated land enclosed in this division is 1,727,131
and unenclosed, 72,004 acres. In cultivation there is an area of
acres, only 507 acres of which are tilled by tenants. The averag
of large estates over 10,000 acres in extent is 33,924 acres.

The holdings on the western plains may be classified as follows

Size of Holdings.	Alienated Holdings.	Area of Holdings.		Area in Cultiva	
		Total.	Proportion to Total Area alienated in District.	Total.	Pro to of H
	No.	acres.	per cent.	acres.	per
1 to 30 acres	399	1,425	0·08	235	
31 to 400 acres	360	49,967	2·78	2,224	
401 to 1,000 acres.........	182	121,941	6·78	1,895	
1,001 to 10,000 acres ...	186	540,206	30·02	3,120	
10,001 acres and upwards	32	1,085,596	60·34	1,656	
Total	1,159	1,799,135	100·00	9,130	

ea of Crown lands occupied in this division is very large, there less than 73,272,245 acres under various forms of lease. omestead lease there are 10,520,976 acres. There is a small 44,822 acres under conditional lease, granted under the Act of it. this form of lease is no longer obtainable in the western The number of lessees of Crown lands is 1,643, of whom upy Crown lands in addition to their alienated holdings, while cupy Crown lands only. The value of improvements is returned 18,643—an average of about 1s. 6d. per acre occupied. total area of alienated lands and Crown lands occupied is 180 acres, which is all devoted to pastoral pursuits with the n of 19,980 acres under crop. The total area of the counties of tern plains is computed at 82,705,080 acres, and the area ng unoccupied or unalienated is, therefore, about 7,670,000

AREA OF HOLDINGS.

ll be gathered from an analysis of the figures which have been at settlement in New South Wales has hitherto tended towards entration into comparatively few hands of the lands alienated to number of individual selectors, and that in the great majority the owner of the land is also the occupier. Tenancy, as underolder settled communities, has made comparatively little progress, er cent. of the land alienated being yet in the occupancy of the ors themselves, or an area of 39,561,087 acres; whilst only 34 acres, or 9·09 per cent., are held under lease from the free-

v will be found the number of holdings of various sizes through- colony, distinguishing freehold from rented land. It will be ood that here, as elsewhere in this chapter, though reference is holders who occupy Crown lands in addition to alienated lands, of such Crown lands is not considered in treating of the size of lings:—

of Holdings.	Number of Holdings.						
	Freehold.	Private Rented.	Partly Freehold & partly Private Rented.	Freehold, with Crown Lands attached.	Private Rented, with Crown Lands attached	Partly Freehold, partly Private Rented, partly Crown Lands.	Total.
es	11,655	6,056	842	187	28	16	18,784
acres	18,253	7,347	2,121	5,244	215	298	33,478
0 acres	3,284	730	612	2,661	61	266	7,623
,000 acres..........	1,636	241	401	2,031	41	289	4,739
es and upwards	78	5	24	476	1	90	674
Total	34,906	14,388	4,000	10,599	346	1,059	65,298

The alienated area of the holdings referred to in the table just whether freehold or rented, will be found in the figures subjoined, also show the percentage of alienated land to be found in the hol of each specified size, as well as the proportion each size of ho whether freehold or rented, bears to the total area alienated :—

Size of Holdings.	Area of Holdings.			Proportion to T Alienated Area of the exclusive of hold under 1 acre.		
	Freehold.	Rented.	Total.	Freehold.	Rented.	T
	acres.	acres.	acres.	₱ cent.	₱ cent.	
1 to 30 acres	97,913	62,193	160,106	0·23	0·14	
31 to 400 acres	3,802,592	1,136,583	4,939,175	8·74	2·61	
401 to 1,000 acres	4,099,261	743,170	4,842,431	9·42	1·71	
1,001 to 10,000 acres ...	10,985,985	1,365,126	12,351.111	25·24	3·14	
10,001 acres and upwards	20,575,336	650,762	21,226,098	47·28	1·49	
Total...............	39,561,087	3,957,834	43,518,921	90·91	9·09	

The above figures strikingly illustrate the present condition of sation in New South Wales, and their meaning should not be lost of by those who watch with attention the various phases of settl in this country. The proportion of land in holdings less than 30 in extent is only 0·37 per cent. of the total area of land alienated colony, and represents an aggregate of 160,106 acres out of a 43,518,921 acres; this small acreage consists of 18,784 holdings, occupying an average of 8·5 acres. Holdings between 31 an acres in extent number 33,478, with an aggregate area of 4,93 acres, or 11·35 per cent. of the area alienated in the colony, givi average of 147·5 acres per holding. It is in this category that a portion of the land devoted to cultivation is to be found. In between 401 and 1,000 acres are to be found 7,623 estates, the n decreasing rapidly as the area increases, aggregating in all 4,84 acres, or 11·13 per cent. of the area alienated, giving each an a of 635·2 acres. The tendency just noted becomes still more the holdings between 1,001 and 10,000 acres in extent, their being only 4,739, whilst they aggregate 12,351,111 acres, or 28· cent. of the total area alienated in the colony, giving an ave 2,606 acres per holding. The climax is reached, however, in the hol than 10,000 acres in extent. Of these there are but 674, g 21,226,098 acres, or 48·77 per cent. of the whole area from the Crown, each averaging an area of 31,492 acres.

SETTLEMENT AND AGRICULTURE.

emarks as to the relative state of agriculture and of settlement ienated rural lands of the colony cannot fail to be of interest, when read in conjunction with the preceding figures. The table deals with this question, and the figures carry with them explanation :—

e of Holdings.	Alienated Holdings.	Area Alienated.		Area Cultivated.	
		Total.	Proportion to area of Colony.	Total.	Proportion to Area Alienated
	No.	acres.	per cent.	acres.	per cent.
es....................	18,784	160,106	0·08	54,774	34·21
acres.....................	33,478	4,939,175	2·52	692,569	14·02
0 acres	7,623	4,842,431	2·47	397,183	8·20
0,000 acres	4,739	12,351,111	6·30	449,754	3·64
es and upwards......	674	21,226,098	10·83	184,708	0·87
Total.....................	65,298	43,518,921	22·21	1,779,008	4·08

gh the highest proportion of land cultivated in any of these hen compared with the total area alienated in the colony, is holdings from 31 to 400 acres in extent, yet when compared aggregate area alienated in the series itself it represents only r cent. of it; whilst on the smaller holdings, less than 31 acres t, as much as 34·21 per cent. of the area alienated is under n. The proportion considerably decreases as the higher areas ed, being reduced to 0·87 per cent. in those over 10,000 acres. the table given on page 319, some interesting information may ed with regard to the proportion of the number of owners of still occupy their freeholds, those who reside on rented lands, who occupy, in addition to their freeholds, lands rented either vate owners or from the Crown; but a more comprehensive these two phases of settlement may be obtained by an

AGRICULTURAL PRODUCTION

THE soil of New South Wales is as varied as the climate is di fied, and within the boundaries of the colony may be culti not only the productions of the temperate regions, but even th cold and of sub-tropical latitudes. Except in the inaccessible or r portions of the mountain chains and the more arid regions of the western districts, the soil is almost everywhere susceptible of cultiv The area absolutely unfit for occupation of any sort has been re estimated at less than 5,000,000 acres; and it may be said th greater part of the land adapted for settlement is in some form or capable of being cultivated. But success in tillage in the colo altogether independent of the mere fitness of the soil for cultiv An irregular rainfall and a want of uniformity in the seasons, w are the chief characteristics of the climate of a large part of interior, have impeded the advance of agriculture on the great we plains. And to these obstacles there may be added the cost of tra which, owing to the great distance that produce has to be carri land, has told greatly against cultivation for export—a resource wh must be the chief hope of the farmers in a country so sparsely p lated as New South Wales, and consequently one affording such a home market.

CULTIVATION.

The records relating to the farming operations of the early days of th colony are necessarily both imperfect and meagre. Among other it of interest, it is recorded that the first settler, a man named J Ruse, entered on his farm of 30 acres at Parramatta on the 2 February, 1789; and that the first free emigrant to undertake the c tivation of the soil of the colony was a German, named Philip Scha who came out with the First Fleet as an agricultural superintend chiefly with a view to attempt the culture of tobacco on behalf of th Government. The first Government farm was an area of 9 acres Farm Cove, the designation of which still preserves a memory of th early essay in husbandry, as does that of Garden Island, where one the first attempts in fruit-growing was made. The character of th soil in the vicinity of Farm Cove was, however, by no means favour to agriculture, and the crop produced was consequently very inadequ

5,890 acres are used for grazing and dairying, and 1,821,829 acres
riculture. The total value of improvements on Crown lands is
ed at £10,325,639—equal to 1s. 8·9d. per acre.
figures in regard to holdings represent rural settlement only,
count for 43,518,921 acres out of a total of 45,739,090 acres that
en alienated. The balance of 2,220,169 acres represents lands
es and towns, and rural lands abandoned, to all appearances, by
owners. The lands of the colony are held by 136,000 persons,
ners being almost equally distributed between the towns and the
y.

LABOUR SETTLEMENTS.

June, 1893, an Act was passed to promote the establishment of
r settlements, thus enabling persons without capital to provide for
elves and their families. The land may be leased for twenty-eight
, with a right of renewal, and loans of money are granted to enable
ttlers to carry on operations, the first repayment of the loan and the
of the land not being required until four years from the date of
ase. During 1894 an Amending Act was passed, empowering
inister to double the amount of loan authorised under the original
The control of each establishment is left in the hands of a Board.
s are provided by the Treasury from which the Board may, with the
val of the Minister, grant the following sums:—To each enrolled
ber with a family dependent on him, not exceeding £50; to married
ns without family, a sum not exceeding £40; and to each member
rried, a sum not exceeding £30. At the close of the year 1897,
settlements were in existence, viz., Wilberforce and Bega. The
Town settlement, which had been established in June, 1893, with
ea of 2,100 acres, was converted into a Casual Labour Farm on the
June, 1896. The Bega settlement was established in July, 1893,
rea being 1,360 acres and the population consisting of 29 men,
omen, and 123 children, or a total of 180. The improvements are
d at £2,055, and the amount of loans is £2,106. In August, 1893,
Vilberforce settlement was formed, and now contains 882 acres,
g home and employment for 17 men and 14 women, with 53
en, or a total population of 88. The value of improvements is
7, and the amount of loans advanced £2,065.

Only about 0·9 per cent. of the total area of New South Wales actually devoted to the growth of agricultural produce, and if small extent of land upon which permanent artificial grasses have b sown for dairy-farming purposes be added to the area under cro the proportion reaches only 1·1 per cent. of the total area of the colo and represents about 1·7 acres per head of its population. The prop tion of the cultivated area on alienated holdings is only 4·1 per cent the total area of alienated rural lands.

Agricultural settlements, pure and simple, are confined to very limi areas in the alluvial lands of the lower valleys of the coastal rivers, in parts of the southern and central divisions of the table-land; the growth of crops is now largely carried on in conjunction w grazing—a practice which is rapidly extending, even amongst the la landowners. Tenant occupancy, so general in the United Kingdo is but little known in the colony; for of the total area under cro 1,361,785 acres, or 74·74 per cent., were cultivated by the owne while 460,044 acres, or 25·26 per cent., were cultivated by ten occupiers, including Crown land lessees. If, however, the area und permanent grasses were taken into consideration, the proportion cultivated leased lands would be somewhat higher, as a number of t dairy farms in the southern coast district, where grass is largely so are held on lease.

New South Wales is essentially a pastoral country, and the cultiv tion of the soil is secondary to stock-breeding. This circumstance is b no means due to lack of good land, and it cannot be ascribed to th defects of the climate; for the colony possesses land the capabilities o which are unsurpassed for the production of any kind of agricultural pro duce, and its climate is certainly superior to that of other parts of the Au tralian continent where the cultivation of cereals has been carried on f years past. Taken as a whole, the yield of crops in New South Wales i larger than that obtained in any other continental colony, but, at the sam time, communication with the metropolitan market is much more difficul Agriculture cannot be developed unless access to the markets be render both easy and cheap, and to secure this desirable end in a country so va and with so small a population, is a matter not easily accomplished. U to the present, stock-rearing has maintained the position of an occupati which, while entailing considerably less physical labour and perso inconvenience, has yielded results more remunerative than those agriculture; but as population increases, and there remains no mo land to be taken up for grazing purposes, agricultural pursuits must b resorted to under the pressure of an ever-increasing demand. As it i the land devoted to agriculture affords permanent employment to a fa proportion of the working population of the province, and the indust is rapidly becoming an important one, the last five years having witne an extension equal to 80 per cent. in the area under crops, and a increase of over 5,000 hands employed in agricultural pursuits.

e number of persons reported as employed in agricultural and dairy- ng pursuits during the year ended March, 1898, was 92,994, of whom 0 were females. Of the total number, 62,114 males and 5,437 females engaged in purely farming operations, whilst the dairy-farming try gave employment to 12,940 males and 12,503 females. If to be added 27,020 persons engaged in pastoral pursuits, it is estimated rural occupations absorb the energies of 120,014 persons. As the aphical distribution of employment in these pursuits presents in- ting features, the numbers of persons employed in the great divisions e colony, according to the classification adopted, are given below. ust be understood that the number given as engaged in dairy- ing does not include 917 hands employed in town factories:—

Division	Persons employed in Agricultural Pursuits principally.					Persons em- ployed in Pastoral Pursuits.	Persons em- ployed in Rural Occupa- tions.
	Agriculture.		Dairy Farming.		Total.		
	Males.	Females	Males.	Females			
Coast—							
rthern District	9,785	352	3,362	2,246	15,745	1,083	16,828
nter and Hawkesbury Valleys	6,653	615	1,442	1,648	10,358	789	11,147
unty of Cumberland and Metropolis........	7,338	607	675	299	8,919	187	9,106
uthern District	4,699	125	5,125	3,510	13,459	592	14,051
Total	28,475	1,699	10,604	7,703	48,481	2,651	51,132
Table-land –							
rthern District.........	5,273	298	231	1,097	6,899	2,477	9,376
ntral ,, ...	9,426	1,055	541	1,456	12,478	2,444	14,922
uthern ,, ...	9,448	1,089	1,391	1,732	13,660	4,634	18,294
Total	24,147	2,442	2,163	4,285	33.037	9,555	42,592
Western Slope—							
rthern District.........	1,539	80	35	119	1,773	3,825	5,598
ntral ,, ...	983	176	9	34	1,202	1,767	2,969
uthern District and Valley of the Murray	6,481	1,006	87	307	7,881	4,166	12,047
Total	9,003	1,262	131	460	10,856	9,758	20,614
Western Plains	489	34	42	55	620	5,056	5,676
Grand Total	62,114	5,437	12,940	12,503	92,994	27,020	120,014

the cultivation of their crops. The settler, not the soil, has determ this point. It is, therefore, difficult to divide the country into cultural lands, as distinguished from those purely pastoral in chara

The area devoted to each of the principal crops during the agr tural year ended 31st March, 1898, with the quantity or value of produce harvested, will be found below :—

Description of Crop.	Area.	Production.	Description of Crop.	Area.	Product
	acres.			acres.	
Wheat—			**Sorghum for Green Food**	14,796	.. ..
Grain	993,350	10,560,111 bus.	**Orangeries—**		
Hay	213,720	181,645 tons	Productive	10,097	527,508
Maize—			Non-bearing	3,846	.....
Grain	209,588	6,713,060 bush.	**Grape-vines—**		
Green Food........	11,924	......	For wine-making ..	4,490	864,514
Oats—			For table use	2,649	4,230
Grain	28,605	543,946 bush.	Non-bearing.........	944	.....
Hay	152,598	138,546 tons	**Market-gardens**	6,384	£151,919
Green Fodder	5,958	......	**Pumpkins and Melons** ..	5,432	18,671
Lucerne and Sown Grasses—			**Millet—**		
Hay	33,246	83,154 tons.	Grain	897	13,071
Green Fodder	22,558	......	Green Fodder	1,566	.....
Sugar-cane--			**Rye—**		
Cut this year	12,936	269,068 tons.	Grain	2,032	26,145
Not cut	12,929	......	Green Fodder	1,630	.....
Potatoes	23,816	55,332 tons.	**Turnips**...............	414	2,133
***Fruit Orchards—**			**Tobacco**...............	2,181	19,718
Productive	23,965	£155,534	**Peas and Beans**	531	17,559
Non-bearing	7,054	.. ...	**Mangold-wurzel**	55	428
Barley			**Onions**	381	921
Grain	5,151	99,509 bush.	**All other Crops**	1,228	£17,745
Hay	1,509	2,008 tons			
Green Fodder	3,369	......	Total	1,821,829	.....

* Excluding vines and oranges.

The quantities of agricultural produce harvested during the ended March, 1898, and the values of the various crops, are given in following statement, the values being the averages for the whole col at the time the harvest was gathered :—

Crop.	Production or Area.	Value.	Crop.	Production or Area.	Val
		£			
Wheat	10,560,111 bus.	2,200,023	Tobacco	10,718 cwt.	
Maize	6,713,060 ,,	923,045	Grapes	4,230 tons	
Barley	99,509 ,,	14,927	Oranges and Lemons	527,508 cases	
Oats	543,946 ,,	61,194	Orchards	23,265 acres	
Other Grain	39,216 ,,	5,882	Market-gardens....	6,384 ,,	
Hay	405,353 tons	1,651,270	Peas and Beans....	17,559 bush.	
Straw	46,704 ,,	105,084	Pumpkins & Melons	18,671 tons	
Green Food........	61,801 acres	200,853	Wine	864,514 galls.	
Potatoes	55,332 tons	302,500	Brandy............	10,790 ,,	
Onions	921 ,,	5,760	Unspecified Crops..	1,228 acres	
Turnips and Mangold-wurzel	2,561 ,,	11,805			
Sugar-cane	269,068 ,,	127,808	Total value ....£		

e area under crops, the value of the agricultural produce, and the
ge value per acre for the year 1871, and for each year since 1881,
iven below. It will be seen that the total value of the produce
sted in 1898 was the highest on record, and that the average
per acre under crop represented the best results obtained since
:—

Year ended 31st March.	Area under Crops.	Total Value of Produce.	Average Value per acre.
	acres.	£	£ s. d.
1871	397,389	2,220,000	5 11 9
1881	629,180	3,829,660	6 1 9
1882	583,868	4,194,346	7 3 8
1883	660,227	3,304,891	5 0 1
1884	702,131	3,806,182	5 8 5
1885	735,021	2,836,697	3 17 2
1886	737,701	3,375,882	4 11 6
1887	837,468	3,943,645	4 14 2
1888	855,627	4,151,692	4 17 1
1889	798,966	3,298,759	4 2 7
1890	947,072	4,459,861	4 14 2
1891	852,704	4,136,887	4 17 0
1892	846,383	3,584,490	4 4 8
1893	1,010,727	3,961,367	3 18 5
1894	1,206,992	3,861,771	3 4 0
1895	1,325,964	3,395,571	2 11 3
1896	1,348,600	4,066,946	3 0 4
1897	1,659,717	5,321,569	3 4 2
1898	1,821,829	6,205,953	3 8 1

WHEAT.

n the early days of settlement the Hawkesbury River Valley, and
country adjacent to the towns of Parramatta, Liverpool, Penrith,
nden, and Maitland, were the principal centres of wheat cultivation.
skilful farming, and the consequent exhaustion of the soil, with the
ndant evils of rust, smut, and other diseases, caused these districts
e abandoned little by little as wheat-country, and on the discovery
the Bathurst Plains their importance at once ceased. The districts
Bathurst, Goulburn, Gundagai, Tumut, Young, Monaro, and New
gland were each in turn occupied by agriculturists, and the suitability
heir soil and climate, as well as that of the whole of the mountain
teau, for the growth of this cereal became definitely established.
sequently the cultivation was extended in a south-westerly direc-
n to the Riverina Plains, where at present it is receiving marked
ention, as will be seen from the following table, showing the distri-
tion of the area cut for grain during the agricultural year ended

March, 1898, with the production and average yield of each of the gr
divisions of the colony :—

Division.	Area cut for Grain.	Yield.	
		Total.	Per acre.
	acres.	bushels.	bushels.
The Coast—			
Northern District	2,057	31,576	15·4
Hunter and Hawkesbury Valleys	7,984	162,603	20·4
County of Cumberland and Metropolis	272	4,272	15·7
Southern District	1,791	30,189	16·9
Total	12,104	228,640	18·9
The Table-land—			
Northern District	68,437	1,301,289	19·0
Central ,,	162,697	2,161,233	13·3
Southern ,,	204,210	1,983,064	9·7
Total	435,344	5,445,586	12·5
The Western Slopes—			
Northern District	14,851	265,094	17·9
Central ,,	28,155	516,271	18·3
Southern District and Valley of the Murray	500,595	4,094,616	8·2
Total	543,601	4,875,981	9·0
The Western Plains	2,301	9,904	4·3
Grand Total	993,350	10,580,111	10·6

It is interesting to note that agriculture is gaining ground in tho
districts where the greatest number of the huge freehold estates, accu
lated by pastoralists under the auction sales and improvement claus
the Land Act of 1861, are situated. It is in the valleys of the Mur
the Murrumbidgee, and the Lachlan that the struggle between squ
and selector has been fiercest, and it is there that the most rem
increase in wheat-growing and in agriculture generally is now exh
This point is illustrated by the following statement, which shows
increase or decrease in the total area cultivated and in the land u

eat in each of the divisions of the colony during the ten years be-
een March, 1888, and March, 1898 :—

Division.	Total area under Crops.		Area under Wheat for Grain and Hay.	
	1888.	1898.	1888.	1898.
	acres.	acres.	acres.	acres.
he Coast—				
Northern District	99,697	143,396	263	2,239
Hunter and Hawkesbury Valleys	68,267	71,307	4,969	9,249
County of Cumberland and Metropolis	18,132	48,439	114	1,376
Southern District	43,495	52,963	1,653	3,036
Total	229,591	316,105	6,999	15,900
he Table-land—				
Northern District	71,481	133,566	38,548	75,814
Central ,,	199,782	322,507	115,358	210,045
Southern ,,	151,717	335,106	107,797	238,107
Total	422,980	791,179	261,703	523,966
he Western Slope—				
Northern District	12,593	29,937	8,247	20,486
Central ,,	30,433	46,151	24,566	40,535
Southern District and Valley of The Murray	151,218	618,477	140,167	587,163
Total	194,244	694,565	172,980	648,184
The Western Plains	8,812	19,980	8,048	19,020
Grand Total	855,627	1,821,829	449,730	1,207,070

The figures just given show clearly that by far the larger proportion f the increase, both in the area devoted to wheat and in general ultivation, has taken place in the Riverina district ; in some of the ther parts of the country the additional land devoted to cereals has een, on the whole, comparatively small. In the following table the

area under wheat harvested for grain and the yield therefrom are g
The periods selected are, as in the former table, the years ended M
1888 and 1898 :—

Division.	1888.		1898.	
	Area for Grain.	Production.	Area for Grain.	Prod
	acres.	bushels.	acres.	bu
The Coast—				
Northern District	192	4,635	2,057	
Hunter and Hawkesbury Valleys	2,856	40,074	7,984	1
County of Cumberland	4	60	272	
Southern District	189	3,151	1,791	
Total	3,241	47,920	12,104	2
The Table-land—				
Northern District	34,766	567,094	68,437	1,3
Central ,,	103,605	1,252,334	162,697	2,1
Southern ,,	101,965	1,246,701	204,210	1,9
Total	240,336	3,066,129	435,344	5,4
The Western Slope—				
Northern District	5,989	80,166	14,851	2
Central ,,	18,884	230,294	28,155	3
Southern District and Valley of the Murray	120,389	1,266,382	500,595	4,0
Total	145,262	1,576,842	543,601	4,8
The Western Plains	551	4,958	2,301	
Grand Total	389,390	4,695,849	993,350	10,5

The cultivation of wheat during the last thirty years has been irregular. For some years prior to 1867 the area under crop remained almost stationary at a little more than 125,000 acres 1867, however, the acreage increased to 175,000 acres, and eleven later the area reaped for grain was practically the same, although d the intervening period it had fluctuated to the extent of 50,000 Then more land was again laid under the cereal, and in 1879 the increased to 233,252 acres. Since that time cultivation has been siderably extended. A great impetus was given to the indust

, when the area reaped for grain increased from 596,684 acres to 12 acres, but this was exceeded in 1898 by nearly 130,000 acres, at the present time the area under wheat for grain and hay ubtedly exceeds 1,600,000 acres. Below will be found a statement ing the area under wheat for grain since 1869, with the total uction and the average yield per acre :—

r 31st h.	Area under Crop.	Yield.		Year ended 31st March.	Area under Crop.	Yield.	
		Total.	Average per acre.			Total.	Average per acre.
	acres.	bushels.	bushels.		acres.	bushels.	bushels.
69	164,206	1,787,085	10·88	1885	275,249	4,271,394	15·52
70	189,452	3,200,959	16·89	1886	264,867	2,733,133	10·45
71	147,997	999,595	6·75	1887	337,730	5,868,844	17·37
72	154,030	2,229,642	14·48	1888	389,390	4,695,849	12·06
73	177,551	2,898,463	16·32	1889	304,803	1,450,503	4·75
74	169,330	2,273,620	13·43	1890	419,758	6,570,335	15·65
75	166,911	2,148,394	12·87	1891	333,233	3,649,216	10·95
76	133,609	1,958,640	14·66	1892	356,666	3,963,668	11·11
77	145,608	2,391,979	16·43	1893	452,921	6,817,457	15·05
78	176,686	2,455,507	13·84	1894	593,810	6,502,715	10·95
79	233,252	3,439,326	14·74	1895	647,483	7,041,378	10·88
80	233,368	3,613,266	15·48	1896	596,684	5,195,312	8·71
81	253,137	3,717,355	14 69	1897	866,112	8,853,445	10·22
82	221,887	3,405,966	15·35	1898	993,350	10,560,111	10·60
83	247,361	4,042,395	16·35				
84	289,757	4,345,437	15·00				
				Average for 30 Years.....			12·39

he great advance which the colony is now making in wheat cultiva- is in every way gratifying, and it is unfortunate that the enterprise the farmers should have been robbed of much of its reward by the ere drought with which the country was afflicted during the season t closed. For a long time the colony lagged behind its neighbours this important industry ; but, despite the vicissitudes of the climate, vill be seen from the above table that lack of capacity to produce a able average has not been the cause of this tardiness in development. ting the whole period of thirty years, the average yield has been 39 bushels to the acre. A yield of 15 bushels has not been uncommon ; l in 1887 the average reached the comparatively high figure of 17·3 hels. In 1895-6 many of the crops were ruined by the absence of , and the average of 8·71 bushels yielded in that year was the lowest ained since 1869, with the exception of 6·75 bushels in 1871 and 5 bushels in 1889. During the next two years the yield was 10·22 l 10·60 bushels respectively—a considerable improvement on that of 5-6, but still smaller than the average secured in every other year e 1889.

the consumption for the year ended December, consequently in 1897 a slight deficiency is apparent :—

Period or Year.	Total per annum.			Average per head per annum.		
	Apparent consumption exclusive of seed.	Home production available for food.	Apparent deficiency.	Apparent consumption exclusive of seed.	Home production available for food.	Apparent deficiency.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1862-66	2,397,139	977.343	1,419,796	6·2	2·5	3·7
1867-71	3,038,512	1,712.619	1,325,893	6·4	3·6	2·8
1872-76	3,638,081	2,090.807	1,547,274	6·4	3·7	2·7
1877-81	4,415,178	2,802,310	1,612,868	6·4	4·0	2·4
1882-86	5,742,906	3,316,495	2,426,411	6·5	3·8	2·7
1887-91	7,159,762	3,896,907	3,262,855	6·7	3·6	3·1
1892-96	7,262,349	4,952,101	2,310,348	5·9	4·0	1·9
1888	7,909,104	4,186,298	3,722,806	7·6	4·0	3·6
1889	5,902,644	822,206	5,080,438	5·5	0·8	4·7
1890	7,916,391	6,049,010	1,867,381	7·2	5·5	1·7
1891	6,261,027	3,120,340	3,140,687	5·5	2·7	2·8
1892	6,489,476	3,285,772	3,203,704	5·5	2·8	2·7
1893	7,656,374	5,947,851	1,708.523	6·3	4·9	1·4
1894	7,360,690	5,536,115	1,824,575	5·9	4·5	1·4
1895	7,305,786	6,079,755	1,226,031	5·8	4·8	1·0
1896	7,499,419	3.911.013	3,588,406	5·8	3·0	2·8
1897	7.967,188	7.344.276	622,912	6·1	5·6	0·5

It will be seen from the statement last given that up to 1896 New South Wales was far from the position of being able to supply the wheat required for the food of its inhabitants, but that the deficiency was nearly supplied in 1897. In 1898 the colony practically became independent of outside supplies.

The present consumption of wheat in New South Wales, as shown above, is about 6·1 bushels per head—a rate which is higher than that of most countries the records of which are available for reference. The consumption includes what is used for all purposes except seed, a fact which must be borne in mind, as the quantity of wheat used for other purposes than food is not inconsiderable.

pared with the production of wheat in the majority of European
ies, the yield of New South Wales will appear inconsiderable, both
ırds the total quantity obtained and the average per acre. In the
ng table will be found returns from some of the chief wheat-
g countries of the world, showing the average production per acre
ı cereal :—

Country.	Average yield per acre.	Country.	Average yield per acre.
	bushels.		bushels.
rk	32·3	Ontario	19·9
Kingdom	26·9	Hungary	13·6
y	23·0	Italy	10·7
n	25·2	United States	11·7
d	26·6	Quebec, Nova Scotia, and New Brunswick.	9·0
ıba	18·6	Russia in Europe	9·0
ny	29·5		
ı	17·9		
a	16·1	New South Wales (30 years)	12·4
ı Columbia	16·1	Australasia (10 years)	8·7

DEFICIENCY OF WHEAT PRODUCTION.

1898, for the first time, the production of wheat in New South
s exceeded the consumption ; but, unfortunately, although a much
r area was sown in the season of 1898-9 just closed, and the
ning of the season promised favourable results, the complete
ns of the harvest show only a production of 9,232,000 bushels,
ıt sufficient to supply local requirements. The accompanying table
een prepared with a view to illustrate the state of the colony in
d to the total consumption of wheat, the home production, and the
eficiency for the last thirty-six years. In the column giving the
consumption, no account is taken of the quantity added to or taken
stocks, as the case may be ; and the figures showing the consump-
ıre exclusive of wheat required for seed. For each year the pro-
ın for the twelve months ended March has been placed against

During the last three years there has been a considerable fall in the wheat yield of the world, the total decrease repre 330,000,000 bushels. In 1895 the European production was 41,0 bushels less than in the previous year ; in 1896 the yield was son smaller than in 1895 ; while in 1897 the yield was 294,000,000 l lower than in 1896. In America there was the great reductio 649,000,000 bushels in 1894 to 631,000,000 in 1895 and 542,0 in 1896, the falling off being both in the United States and America ; but in 1897 the American yield was considerably im reaching 700,000,000 bushels. In Australasia the production i was better than in the three previous years, but was still much the 1893 yield, the crops for the last four years having been affec drought. For the past season of 1898, excellent results hav secured in all the colonies except New South Wales. The Afric Asiatic yields in 1897 were less than those secured a few yea and, altogether, the total production of the world in that ye estimated at 2,245,000,000 bushels, while at the present time t sumption is set down at 2,450,000,000 bushels, with an annual i of 20 to 28 million bushels. The deficiency during the last tw was made up from the reserve stocks, which have now practically r the point of exhaustion ; but the yield in 1898, which has been factory in all the great wheat-producing countries except Russ the highest on record, and enabled stocks to be replenished.

Notwithstanding the abnormally high American returns, their upon the world's supply is only of temporary duration. In a years the importing countries of Europe require a supply of 200,000,000 bushels, which the exporting countries are not alwa to furnish ; and it is an acknowledged fact that in the United the growth of the population is proportionally greater than the in of area sown to this cereal. In Russia and in Central Europe th sumption of wheat is increasing among populations that were in years satisfied with grain of an inferior description, while th throughout the old world a tendency to a reduction in the area wheat cultivation. In view of these facts, it is reasonable to ex great development in wheat-growing in Australia, which must, many more years pass, begin to take a prominent place among exporting countries, and in this development New South Wales pr to play an important part. A great proportion of the immense a the colony hitherto devoted exclusively to pastoral pursuits cons land which could be profitably utilised for agriculture, much of it more suitable for the cultivation of wheat than some of the land under crop ; and the returns show that wheat-growing, which formerly confined to small farmers, is now engaging the attentio number of the large landholders.

Much of the new area which is being brought under whe New South Wales is cultivated on the shares system. Under the owner leases the land to the agricu.turist for a season, or a asons, for the purpose of wheat-growing only, the farmer possesse right of running upon the estate the horses necessary for ng the farm, and the owner the right of depasturing his stock the land is not in actual cultivation. It is usual for the owner to e seed, and the tenant labour ; and up to a specified yield the s to the agreement take equal shares of the produce, any excess to the farmer as a bonus.

PRICE OF WHEAT.

price of wheat is subject to constant fluctuation, as the following giving the average rates ruling in the Sydney market in the months bruary and March of each year since 1864, will show. These s exhibit clearly the tendency to a gradual reduction in the value cereal down to 1895, when the price was the lowest of the series. 96, however, with a decrease in the world's supplies, the price took t jump upwards, and led to an extension of cultivation in Aus-ia. Hitherto, with a deficiency in the local production, the price dney has been generally governed by the rates obtained in the bouring Australian markets where a surplus was produced. These, , are now determined by the figures realised in London, which are ly equal to those ruling in Adelaide, plus freight and charges. The s in the following table are for an Imperial bushel, and, being for wheat, are slightly below the average for the year :—

	February.		March.		Year.	February.		March.		Year.	February.		March.	
	per bushel.		per bushel.			per bushel.		per bushel.			per bushel.		per bushel	
	s.	d.	s.	d.		s.	d.	s.	d.		s.	d.	s.	d.
	7	0	7	6	1876	5	1½	5	6	1888	3	6	3	6½
	9	6	9	7½	1877	6	1½	6	6	1889	4	9	5	3
	8	4½	8	0	1878	6	1½	5	7½	1890	3	6	3	6
	4	3	4	4	1879	5	0	4	9½	1891	3	7½	3	10
	5	9	5	9	1880	4	8	4	9	1892	4	9	4	9
	4	9	4	10	1881	4	1	4	3	1893	3	6½	3	6
0	5	0	5	1½	1882	5	5	5	6	1894	3	0	3	0
1	5	7½	5	9	1883	5	1½	5	2	1895	2	5	2	7
2	5	0½	5	3	1884	4	3	4	3	1896	4	4	4	4
3	5	1	5	8½	1885	3	10½	3	7½	1897	4	4½	4	5
4	6	9	6	1½	1886	4	3½	4	5	1898	4	2	4	2
5	4	7½	4	6	1887	3	10	3	11					

COST OF GROWING AND EXPORTING WHEAT.

The cost of raising wheat depends entirely upon the size of th ing. A large farm, with first-class agricultural appliances, is ca being worked at nearly half the cost of a small one, and in case the initial expenses of suitable machinery have been disbursed of production varies from 1s. to 1s. 3d. a bushel. An estim cost of growing wheat ought to include rent, or interest on p money of land, and carriage to the point of consumption. For so extensive as that over which wheat-growing is pursued in Ne Wales, a separate estimate of these items is well nigh impossible is evident that they tend to a fixed quantity, for where facil reaching market are large, and the cost inconsiderable, rent is h where conditions are unfavourable rent is correspondingly low. L out of consideration rent, interest, and carriage, the cost of wheat in New South Wales is approximately as follows :—

	s.	d.	
On large farms, with first-class appliances	15	6	per ac
On moderate-sized farms, with good appliances ...	20	0	,, ,
On small farms	27	0	,, ,

The rates given include seed, expenses incurred in the prepar land for cropping, and in sowing and harvesting, as well as depr in stock and appliances. The cost of bags is, however, not incl

This estimate refers to farms worked in the ordinary way proprietors or occupiers. The tendency is towards a greater nu large farms, with a fall in the general cost of production; and utilisation of some of the pastoral areas for cultivation on " the cost is being still further reduced. It is evident that, w season is favourable, the large grower will be in the best positio the market when the question of export arises. Apart from th cost of raising the cereal, the cost of placing the wheat on the market, from the point of production on the farm, might be as follows :—

Cartage to railway station	3d.	per bush
Average railway freight	4½d.	,,
Cartage, Darling Harbour to ship	1d.	,,
Ocean freight (25s. per ton)	8d.	,,
Insurance	0½d.	,,
Selling and other charges in London	4d.	,,
Total	1s. 9d.	,,

The London charges cover city and market dues, landing a ing, sampling and superintending, rent, and brokerage and co It is reasonable to expect that in the future this cost of export 1s. 9d. per bushel will be somewhat reduced. Thus, freight

ted at 25s. per ton, which is the average for the past four years:
re has been very little exportation during that period, and as
the trade assumes any proportions the freight may fall to 21s.
20s. per ton. Also, in the course of time, the extension of the
will reduce the charge for conveyance of wheat to the trucks;
doubt improved facilities for shipment at Darling Harbour will
a still further reduction. On the other hand, London charges
run up to 5d. per bushel, and, taking all things into consideration,
t likely that the cost of exportation will fall below 1s. 6d. per
, at which figure there is little in favour of the American
er, reckoning railway freight from Chicago to the Atlantic
rd. In the case of the Argentine, the cost would be about the
including railway freight from Rosario to Buenos Ayres; but it is
t that the cost of production is not so high as in New South
. for in a Consular report to the Board of Trade it is stated that
can be delivered at Rosario at less than 1s. 6d. a bushel. The
e price of wheat in London for the last seven years was 3s. 5¾d.
shel, the maximum being 4s. 7½d. in 1891, and the minimum
d in 1894.

AUGMENTATION OF THE WHEAT YIELD.

reduction of the wheat-growing areas in the old world, and the
tion in the American exportable surplus with the growth of
tion, have called forth a warning from Sir William Crooke, in his
Presidential address to the British Association, that recourse
soon be had to chemical science for the purpose of increasing the
tive capacity of the soil. It is possible that this eminent scientist
iled to recognise the immense possibilities of Australia, not to
of other sparsely populated countries whose contributions to the
wheat supply are insignificant at the present time; still, the
n of increasing the productiveness of wheat-lands is bound to
the attention it deserves, especially in countries where there is
ally no more land to be brought into cultivation. In France,
, much has already been accomplished in this direction. In some
s the poorer peasant farmers still pursue their calling in a
ve manner, but in other parts of the country the application of
fic knowledge has greatly increased the fertility of the soil, and
rage yield is rising. In one case, Professor Grandeau had no
ty in increasing the yield from 25 to 38 bushels per acre without
expenditure on manure; in another case, 70 bushels per acre
ured from a farm of 12½ acres. Although at the present time
rage yield in France is only 18 bushels, yet the highly cultivated
s give an average of over 30 bushels; indeed, in some of these
s 33 bushels is regarded as a merely satisfactory yield—a good
uld be represented by 43 bushels, and in exceptional cases 48 to
hels are obtained.

In New South Wales, with its great areas of arable land, necessity for the adoption of the higher forms of cultivation has yet been felt. It is certain, however, that the serious foundation o agricultural industry will lead to an inquiry into the best metho cultivation, which involve deep ploughing, less seed, and sowing by with fertilisers. At the Wagga Experimental Farm an acre of sown with only 4 lb. of seed, put in in rows, resulted in a crop o bushels. According to the advocates of drilling, the proper quanti sow is 8 or 9 lb. per acre, whereas for broadcasting not less th bushel is used, and generally rather more. The system of rotati crops also favours an increased yield, leguminous crops suppl nitrogen to soil which has been robbed of it by cereals. For the pre the holders of large estates who have taken to wheat-farming wi doubt find it more advantageous to secure lighter crops off exte areas with a small amount of labour. Lower values locally ma expected to accompany a large export trade, and though the gr with thousands of acres under crop will get a fair return from a average yield, it will be necessary for the small farmer to reso scientific cultivation This matter is now engaging the attention o Department of Agriculture, so that it may be prepared to re assistance to the grower.

WHEATEN HAY.

Wheat is grown in considerable quantities for hay and dry f for cattle, and the area cut for hay is steadily increasing, althou course, it is largely dependent upon the fitness of the crops to be r for grain. The produce, however, is still short of the requiremen the colony. The following statement shows the area and producti wheat cut for hay, in quinquennial periods from 1863, and annuall the last ten years :—

Period or year.	Area.	Yield per annum.		Period or year.	Area.	Yield per ann	
		Total.	Average per acre.			Total.	A pe
	acres.	tons.	tons.		acres.	tons.	t
1863 67	10,296	9,693	1·0	1891	83,827	96,014	1
1868 72	12,535	13,346	1·1	1892	66,435	75,883	1
1873-77	10,690	12,876	1·2	1893	89,396	116,061	1
1878-82	31,675	44,705	1·4	1894	101,875	100,482	1
1883-87	71,543	74,180	1·0	1895	125,797	136,837	1
1888-92	79,264	84,936	1·1	1896	172,614	99,679	[illegible]
1893 97	130,164	114,279	0·9	1897	161,136	118,337	[illegible]
1889	102,838	42,041	0·41	1898	213,720	181,645	[illegible]
1890	82,880	140,348	1·69				

From the foregoing figures it will be seen that the cultivation of wheat for hay increased in a much greater ratio than that for grain, the area cultivated in 1889 being nearly five times that cultivated for the same purpose in 1879. From 1889 the area devoted to hay did not, until 1894, again reach a hundred thousand acres, the seasons generally being so propitious that a greater proportion than in former years was allowed to come to grain. Since 1894, however, the area cut for hay has assumed such proportions that for the year 1898 it was nearly double the area of 1889 and 1894, and nearly ten times that of 1879. A series of dry years in some measure accounts for the increased area devoted to hay; but the steady demand both for hay and chaff, wheaten as well as oaten, and the large import of this produce, fully justify an extension of its cultivation. There still exists a considerable difference between the demand for hay and the supply from within the colony, as there was in 1897 a net import of 41,035 tons of hay and chaff, principally for consumption in the Metropolitan district, but this difference it is well within the capacity of the colony to produce.

The total area under wheat in 1897–8, both for grain and for hay, was 1,207,070 acres, producing 10,560,111 bushels of grain and 181,645 tons of hay, the value of both kinds of produce being £2,926,600.

MAIZE.

The cultivation of maize is almost as important as that of wheat, and forms the staple industry in the valleys of the coastal rivers, which are peculiarly adapted, both with regard to soil and climate, for the growth of this cereal. On the table-land also its cultivation is attended with fair results, but as the land rises in elevation so does the average yield per acre proportionately decrease. Attempts have been made to grow maize in the western division of the colony, but success has been met with only under special conditions of natural or artificial irrigation, for the plant demands a considerable amount of moisture, and thrives better in the humid climate of the coast than anywhere else in the country. Although the area under maize is much less than that under wheat, the gross yield obtained, measured by bushels, is frequently as large as that of the latter cereal, and in some seasons even greatly in excess of it.

The area under maize-culture has increased from 57,959 acres in the year 1862 to 209,588 acres in 1898, and has, therefore, nearly quadrupled within thirty-six years. Considered in the light of the general advance of settlement, particularly in those districts where maize may be successfully cultivated, there is nothing remarkable in the progress here exhibited, especially as there is no lack of land in New South Wales fit for the cultivation of this cereal. In the year 1888 an additional area of 24,705 acres was laid down with maize for grain—a much greater increase than was shown during any of the previous twenty-five years, with the exception of the year 1879, when 25,072 acres were added to the area under maize. For the next five years the area fluctuated co siderably, and in 1893 it showed a decrease of 23,603 acres from t figures of 1891, many farmers, discouraged by the low price realis for the cereal, putting their land to other uses. The year 18 however, experienced the notable increase of 38,336 acres, or o 22 per cent. on the figures for 1893; but during the next four ye only 3,703 acres additional were put under crop.

The state of maize cultivation in the colony during the period fr 1863 to 1898 is shown in the following table. The average ye acreage and production are given in quinquennial periods, and annual for the last ten years, the agricultural year ending on the 3 March:—

Period or year.	Area under crop.	Annual Production.	
		Total.	Average per ac
	acres.	bushels.	bushels.
1863-67	101,245	3,047,478	30·1
1868-72	118,301	3,629,468	30·7
1873-77	117,155	3,804,463	32·5
1878-82	123,160	4,316,819	35·0
1883-87	127,416	4,029,410	31·6
1888-92	175,466	5,330,653	30·4
1893-97	200,845	5,834,322	29·0
1889	166,101	4,910,404	29·5
1890	173,836	5,354,827	30·8
1891	191,152	5,713,205	29·9
1892	174,577	5,721,706	32·8
1893	167,549	5,037,256	30·0
1894	205,885	7,067,576	34·3
1895	208,308	5,625,533	27·0
1896	211,104	5,687,030	27·0
1897	211,382	5,754,217	27·2
1898	209,588	6,713,060	32·0
Average yield for thirty-six years			30·8

The yield per acre is a somewhat variable item, ranging from minimum of 21·8 bushels, which was obtained in the year 1871, t maximum of 38·1 in 1870; but when taken periodically, as in the f part of the foregoing table, the result is more satisfactory, the ra being only from 29 to 35 bushels per acre.

next statement shows the distribution of the area under crop ze during the season 1897–8, with the total and average yield in vision :—

Division.	Area.	Production.	Average yield.
st—	acres.	bushels.	bushels.
thern District	103,411	3,973,620	38·4
tral ,,	26,731	956,362	35·8
thern ,,	16,121	427,079	26·5
le-land—			
thern District	18,641	492,118	26·4
tral ,,	24,486	534,264	21·8
thern ,,	13,878	214,952	15·5
stern Slope—			
thern District	5,014	104,590	20·8
tral ,,	620	5,725	9·2
thern District and Valley of the Murray	668	4,160	6·2
stern Plains	18	190	10·6
Total	209,588	6,713,060	32·0

this table it will be seen that the north coast is the most nt maize-growing district, yielding last season 59 per cent. of l production of the colony, with an average 11·9 bushels per gher than in the south coast district. In the central coast , however, including the valleys of the Hunter, the Hawkesbury, Nepean Rivers, and the metropolitan county of Cumberland, the yield per acre during last season was only 2·6 bushels lower at of the north coast. In both the north and south coast s maize is cultivated extensively in every county, the highest eld coming from the county of Clarence, with 870,015 bushels, e highest average yield from the county of Raleigh, with 55·4 . On the Northern table-land about one-half the production of ision was grown in the counties of Gough, Clive, and Arrawatta. nainder is contributed chiefly by the counties of Parry, Buckarling, and Sandon. The crop is very generally cultivated on tral table-land, the highest average being 43 bushels in the of Westmoreland. On the southern table-land about three- of the production of the division is grown in the counties of rd and Buccleuch; but the production for 1897–8 was very poor, rage for the district being only 15·5 bushels per acre.

estimated yield of the world's crop of maize is about 2,920 bushels, of which quantity New South Wales produces less e five-hundredth part.

The following table, compiled for the purpose of showing the a movement of the maize market of New South Wales for the las years, also shows the yearly requirements for home consumption :—

Year.	Production.	Import.	Export.	Excess of—		Consu
				Import.	Export.	
	bushels.	bushels.	bushels.	bushels.	bushels.	bus
1888	4,910,404	152,010	342,093	....	190,083	4,72
1889	5,354,827	237,660	366,063	....	128,403	5,22
1890	5,713,205	563,721	30,811	532,910	....	6,24
1891	5,721,706	290,786	17,626	273,160	....	5,99
1892	5,037,256	324,949	19,326	305,623	....	5,34
1893	7,067,576	166,841	12,270	154,571	....	7,22
1894	5,625,533	58,027	11,733	46,294	.. ..	5,67
1895	5,687,030	2,489	42,296	....	39,807	5,64
1896	5,754,217	111,018	62,388	48,630	....	5,80
1897	6,713,060	339,643	107,224	232,419	....	6,94

The future of this branch of agricultural industry seems limited t supply of local wants, as New South Wales is adjacent to several n producing countries which are already commencing to compete ag her in her own markets. Until 1890 the colony produced more could be locally consumed, and exported a small quantity to her sou neighbours; but in that year, owing to a sudden increase in the de for maize, the reason for which was not apparent, the large produ would seem to have been insufficient, a net quantity of 533,000 bu of grain having been imported in the course of the twelve months. import, though on a smaller scale, continued until 1895, when ther again a net export of the grain, the quantity being about 40,000 bu In 1896, however, there was again a net import, amounting to n 49,000 bushels; and in 1897, although the production was conside larger than in the preceding year, the net import was as hi 232,000 bushels.

As a deficiency in production has not the usual result of ca a sensible increase in the prices paid to the New South Wales far it is a matter of some doubt whether the importations made hav for their object the keeping of a stock of grain in the hands of d sufficient to prevent a hardening of the wholesale rates. In such the deficiency in the production would seem to be more apparent real. However this may be, it does not seem probable that this b of farming can be expanded with much profit to the growers, the local consumption should considerably increase.

is not only cultivated as a grain crop, but a small area is sown food for cattle, chiefly on dairy farms. In 1897-8, the area vated was 11,924 acres. The total area under maize during n was 221,512 acres.

OATS.

ereal is cultivated as a grain crop, principally in the wheat-listricts of the colony; and as it is essentially a product of cold it thrives best in those parts of the country which have a winter everity. The average yield of the colony for 1897-8 was 19·0 er acre. The table-land is the principal centre of cultivation, h the acreage under the cereal is greatest in the central portion, ern district gives the best return. The northern table-land 28·9 bushels; the central, 16·2 bushels; and the southern, els—these districts producing 436,805 bushels of grain out of ield of 543,946 bushels. On the south-western slope 75,853 ere produced, the average yield being 14·5 bushels to the acre; 7 bushels from the south coast, 10,649 bushels from the Hunter kesbury Valleys, 6,277 bushels from the central-western slope, 8 bushels from the north-western slope, practically complete ction.

llowing table illustrates the state of the cultivation of oats 3. The average yearly acreage and production are given in nial periods up to 1897, and annually for the last ten years ıltural year ending March 31:—

Area.	Production per annum.		Period or year.	Area.	Production per annum.	
	Total.	Average per acre.			Total.	Average per acre.
acres.	bushels.	bushels.		acres.	bushels.	bushels.
12,592	204,979	16·3	1891	14,102	256,659	18·2
13,410	224,534	16·7	1892	12,958	276,259	21·3
17,753	340,286	19·1	1893	20,890	466,603	22·3
19,772	407,277	20·6	1894	34,148	701,803	20·5
20,032	460,003	22·9	1895	30,636	562,725	18·4
15,359	316,188	20·4	1896	23,750	374,196	15·8
29,791	587,992	19·7	1897	39,530	834,633	21·1
7,984	109,931	13·8	1898	28,605	543,946	19·0
22,358	543,330	24·3				

ltivation of oats for grain has been very irregularly pursued e period embraced by this table, rising rapidly during the ars and remaining practically stationary from 1878 until 1894, r 13,000 acres were added to the area under crop during the year. In 1896 the area cut for grain was 10,398 acres han in 1894; but this was due to the failure of the crops,

caused by the absence of rain, the area cropped for hay being 3
acres above the corresponding figure two years before. This de
was more than made up in 1897, when the area cut for grain w
less than 39,530 acres ; and in 1898 the total area sown with oat
the highest recorded, but the greater portion was cut for hay, th
reaped for grain falling to 28,605 acres. The market for oats is c
in the metropolitan district, and the demand depends largely upo
price of maize.

The average yield of oats during the decennial period 1889-9
19·9 bushels per acre, the minimum being 13·8 bushels in the s
1888-9, and the maximum, 24·3 bushels in the following season.
pared with the other continental colonies, New South Wales hol
regard to average yield, the premier position, Victoria coming se
but the oat yield of each of these colonies is surpassed by that of
Zealand and of Tasmania. The climate of the two colonies last
tioned is much better adapted for the successful cultivation of
grain, the average yield per acre in New Zealand in particular
little below that of the United Kingdom, and on a par with the
of the other oat-producing countries of the Old World. The av
annual yield of oats throughout the globe is estimated at about
million bushels.

In the following table figures will be found giving the total prod
and average yield per acre in the Australasian colonies durin
season 1897-8, and the average, together with the maximum
minimum yields, during the last ten years :—

Colony.	Yield 1897-8.		Yield per acre during ten years 18		
	Total	Per acre.	Average.	Maximum.	Minir
	bushels.	bushels.	bushels.	bushels.	busl
New South Wales ..	543,946	19·0	19·9	24·3 (1890)	13·8 (
Victoria	4,809,479	16·3	19·2	25·7 (1893)	11·3 (
Queensland	31,496	17·2	17·7	23·3 (1892)	5·6 (
South Australia	264,444	6·5	9·2	12·8 (1890)	4·7 (
Western Australia ..	29,266	17·4	16·5	20·5 (1890)	10·3 (
Tasmania	1,102,285	28·9	26·9	30·9 (1892)	21·8 (
New Zealand	9,738,391	27·4	30·6	34·0 (1892)	27·4 (
Australasia ...	16,459,307	21·9	25·2	29·4 (1892)	21·3 (

The cultivation of oats as a staple agricultural crop has been
neglected in New South Wales, though the return has not been u
factory. It is possible that in the near future this grain will r
greater attention, especially as the deficiency between the prod
and the consumption is very considerable. The elevated distr

ro, **Argyle, Bathurst, and New England,** in preference to other of the colony, contain vast areas of land where the cultivation of ould be carried on with remunerative results.

production is far from satisfying the wants of the colony, the mportation for 1897, including oatmeal, being equivalent to 33 bushels, of the estimated value of £80,736. New Zealand is incipal source of supply, the quantity obtained from that province equivalent to 746,151 bushels, inclusive of meal, but of this a n was re-exported. Much yet remains to be done before the y can be independent of outside assistance in regard to the supply ts, as during the ten years ended 1897 the average quantity ced was only 27 per cent. of the amount consumed, and there was uple market for the produce of 60,000 acres more than the average reaped.

connection with this subject it may not be generally known the relative nourishment of oats exceeds that of either maize or t, weight for weight. If 100 be taken as the value of oats for ning purposes, the respective values of equal weights of the cereals

Oats	100
Wheat	70
Maize	62

d for equal measures :—

Oats	100
Wheat	131
Maize	107

parts of the colony where the climate is not suitable for maturing rain, a large area is sown for hay. The average area cut for this se during the five years 1877–81 was 70,973 acres, which increased 4,977 acres in the next quinquennium. In 1887 the area stood 6,488 acres, but from that time it fluctuated considerably, and approached the same figure until 1896, when the acreage cut for was 120,857, the dry weather preventing the maturity of the crops rain. The next two seasons were also dry, and in 1897 there was rther increase to 133,946 acres, and in 1898 to 152,598 acres. n hay is in much demand, and sells readily at remunerative prices; as there is less expense and lighter labour attached to this form ltivation, the system of growing for hay is more in favour with the ers than the cultivation of the grain. The areas under the two crops l to each other in the following relation in the year 1897-8 :—

	Acres.
Area under oats for grain	28,605
Area under oats for hay	152,598
Total	181,203

e area harvested for grain was only 15·8 per cent. of the total area with oats. The following statement shows the average annual under and the production of oaten hay, for the four quinquennial periods ended 1893–97, and the actual area and production the last ten years:—

Period or year.	Area.	Production.	
		Total.	Per acre.
	acres.	tons.	tons.
1863–67	36,110	36,948	1·0
1868–72	41,155	46,772	1·1
1873–77	53,401	62,366	1·2
1878–82	64,007	85,259	1·3
1883–87	113,057	131,954	1·2
1888–92	84,414	90,236	1·1
1893–97	107,278	108,933	1·0
1889	85,439	40,753	0·5
1890	103,129	156,920	1·5
1891	70,463	71,305	1·0
1892	76,589	86,077	1·1
1893	101,981	132,426	1·3
1894	82,750	94,128	1·1
1895	96,856	95,517	1·0
1896	120,857	79,635	0·7
1897	133,946	142,957	1·1
1898	152,598	138,546	0·9

In addition to the area cultivated for grain and hay, a small land is yearly sown for green oaten fodder. Last season 5,95 oat-lands were so used. The total area under oats during the 31st March, 1898, was therefore 187,161 acres—an increas acres on the area of the previous season.

Minor Grain Crops.

The minor grain crops harvested are barley, rye, millet, and Little can be said on this subject except that, as in the ca cereals, the suitability of the soil for their production is an fact. There is, however, so little demand for these kinds of their cultivation in the colony is very limited.

In 1897–8 barley was sown on 10,029 acres, of which 5,1 were for grain, with a production of 99,509 bushels; 1,509 for hay, with a yield of 2,008 tons; and 3,369 acres were fodder. The world's estimated annual average yield of barley at 802 million bushels.

The area under rye for grain in 1897–8 covered 2,032 acres, from which was 26,145 bushels, or at the rate of 12·9 bush acre. There were also 1,630 acres of rye sown for green world's annual average yield of rye is estimated at 1,317 millio

Millet was only cultivated over an area of 2,463 acres, 89 which were harvested for grain, the remaining 1,566 acres bein green food for cattle. The greater part of the crop of obtained in the Hunter River Valley. The average produ colony amounted to 14·6 bushels per acre.

e cultivation of sorghum for grain appears to have been abandoned, he area sown in 1897-8 for green fodder for cattle extended over 96 acres, chiefly within the dairy-farming districts of the South Coast. greater number of minor grain crops than those specified above cultivated in the colony, but, owing to the small area tilled, were specified in the agricultural returns.

PRODUCTION AND CONSUMPTION OF GRAIN.

The mean population of New South Wales during the decade ex- nding from 1888 to 1897 was 1,183,993; the average annual production grain of all kinds was 11,630,573 bushels; and the annual consump- n was 15,620,033 bushels. There was, therefore, an average annual ficiency of all kinds of grain during the decade of 3,989,460 bushels. he average annual production per head of all kinds of grain in the lony was 9·8 bushels, and the consumption per head, inclusive of seed rains, 13·2 bushels, leaving a deficiency per head of 3·4 bushels, which d to be made good by importation. The following table exhibits the tal production of the grain crops grown in the colony for the period nder notice :—

Year ended 31st March.	Production of Grain.					
	Wheat.	Maize.	Barley.	Oats.	Rye.	Millet.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1888	4,695,849	4,953,125	84,533	394,762	19,167	4,869
1889	1,450,503	4,910,404	36,760	109,931	5,982	6,917
1890	6,570,335	5,354,827	113,109	543,330	18,239	9,818
1891	3,649,216	5,713,205	81,383	256,659	9,129	2,417
1892	3,963,668	5,721,706	93,446	276,259	11,390	5,079
1893	6,817,457	5,037,256	91,701	466,603	20,356	3,732
1894	6,502,715	7,067,576	114,272	701,803	19,522	9,244
1895	7,041,378	5,625,533	179,348	562,725	13,315	12,460
1896	5,195,312	5,687,030	96,119	374,196	8,078	9,725
1897	8,853,445	5,754,217	110,340	834,633	22,000	7,627
tal for 10 years	54,739,878	55,824,879	1,001,011	4,520,901	147,178	71,888

There is no apparent reason why the local production of grain ould not equal the demand; on the contrary, the resources of the lony are such that under normal conditions the supply should largely ceed the requirements, and an increasing excess of production become arly available for export. The only portion of the colony that should excepted from these remarks is the Broken Hill district and treme west, which is supplied, and will continue to be supplied, from uth Australia. The table given hereunder shows the excess of ports over exports of grain during the decennium. Rye and millet ve been omitted from the table, as neither of these grains is used in

the colony to any extent, and there has been scarcely any exp
import:—

Year ended 31st Dec.	Net Imports of Grain.			
	Wheat.	Maize.	Barley.	Oats.
	bushels.	bushels.	bushels.	bushels.
1888	3,722,806	*190,083	68,410	1,272,664
1889	5,080,438	*128,403	103,153	1,096,854
1890	1,867,381	532,910	45,862	1,653,873
1891	3,140,687	273,160	60,031	1,650,469
1892	3,203,704	305,623	48,641	1,508,081
1893	1,708,523	154,571	58,626	1,413,591
1894	1,824,575	46,294	34,223	822,635
1895	1,226,031	*39,807	5,140	912,007
1896	3,588,406	48,630	44,414	1,013,768
1897	622,912	232,419	45,514	816,233
Total for 10 years	25,985,463	1,235,314	514,014	12,160,175

* Net exports.

The total production, added to the net imports, will give the con
tion, inclusive of seed grains, as shown in the subjoined table:—

Year ended 31st Dec.	Consumption of Grain.					
	Wheat.	Maize.	Barley.	Oats.	Rye.	
	bushels.	bushels.	bushels.	bushels.	bushels.	b
1888	8,418,655	4,763,042	152,943	1,667,426	18,984	
1889	6,530,941	4,782,001	139,913	1,206,785	5,454	
1890	8,437,716	5,887,737	158,971	2,197,203	18,198	
1891	6,789,903	5,986,365	141,414	1,907,128	9,129	
1892	7,167,372	6,027,329	142,087	1,784,340	11,390	
1893	8,525,980	5,191,827	150,327	1,889,194	20,356	
1894	8,327,290	7,113,870	148,495	1,524,438	19,522	
1895	8,267,409	5,585,726	184,488	1,474,732	13,315	1
1896	8,783,718	5,735,660	140,533	1,387,964	8,458	
1897	9,476,357	5,986,636	155,854	1,650,866	22,000	
Total for 10 years	80,725,341	57,060,193	1,515,025	16,681,076	146,906	7

The experience of past years distinctly shows that New South
is, on the whole, better favoured as regards soil, climate, and
natural conditions than any other continental Australian province;
consequently, the average yield per acre of wheat, maize, and ba
over a long period, greater in the parent colony than in any of the
ing four, Victoria not excepted. Extending the field of compari
production of cereals is found to reach an average which place
South Wales on a level with countries usually considered as ri
cultural States. It is better than the average yield of the

. Italy, and Hungary; and, in some respects, almost on a level that of Germany, Austria, and France. The area adapted for growing is very considerable, and with a better knowledge of the ilities of the various kinds of soil, and well-devised means of storage, there should be practically no limit to the production of

STANDARD BUSHELS OF THE VARIOUS GRAINS.

weight of a bushel of wheat varies from 57½ to 63 lb., according ule; but the standards, as enforced by an Act of Parliament, ted to on the 10th February, 1880, for this and for other kinds ain, are as follow :—

Wheat	60 lb.	to the bushel.
Maize	56	,, ,,
Barley—Cape	50	,, ,,
,, English	52	,, ,,
Oats	40	,, ,,
Rye	60	,, ,,
Peas	60	,, ,,
Beans	60	,, ,,

SOWN GRASSES, AS FOOD FOR CATTLE.

he area sown with green food and grasses for cattle is increasing the colony, and during the year 1897-8 there were under cial grasses 376,402 acres (including 59,652 acres of Crown s) or nearly double the area of the year 1887-8. Lucerne is grown nsiderable quantities on the Hunter River flats, and the cultivation his fodder is extending throughout the country, principally along banks of the rivers on the western slope of the Great Divide. The l area under lucerne in 1897-8 was returned at 33,246 acres cut ay, producing 83,154 tons of fodder. In addition to this, there were 58 acres of lucerne and grasses sown for green fodder for cattle.

ermanent grasses are laid down principally in the north and south t districts, 150,854 acres being thus cultivated in the latter sion alone: while in the division of the north coast there were 947 acres under grasses, of which 78,830 acres were laid down in the northern county of Rous. There is also a considerable area under cially-sown grasses for dairying purposes on the southern table-, and to a less extent on the northern and central table-land, and e counties of Denison and Hume on the south-western slope; but e other divisions the area is small, and is cultivated by holders ipally for their own use. It is in those portions of the colony e dairy-farming is principally carried on that the practice of laying a permanent grasses is most general.

e increasing demand for dairy produce, which is now to some nt being exported to the United Kingdom, has had a considerable nce upon the extension of the area under artificial pastures. The following table shows the progress made in this branch of fa during the last ten years, the area having increased from 200,332 in 1888–9 to 376,402 acres in 1897–8. The areas under these art pastures are also given for the north and south coast districts, the dairying industry is most flourishing :—

Year ended 31st March.	Area under Artificial Grasses. New South Wales.	North Coast District.	South Coast District.	Year ended 31st March.	Area under Artificial Gras New South Wales.	North Coast District.	Sout Dis
	acres.	acres.	acres.		acres.	acres.	a
1889	200,332	31,520	155,197	1894	302,412	87,681	15
1890	217,403	39,950	166,057	1895	362,578	82,078	17
1891	388,715	86,592	172,251	1896	300,862	84,982	15
1892	333,238	99,203	148,434	1897	384,016	105,958	15
1893	361,280	83,820	182,025	1898	376,402	102,947	15

NATURAL GRASSES AND RING-BARKING.

The area ring-barked and partially cleared for the preservation natural grasses as food for stock was recorded in 1897–8 at 26,88 acres, 11,830,985 acres being on the western slope, 9,552,293 ac the table-land, 2,343,625 acres in the coast districts, and 3,155,136 on the western plains. By far the largest area ring-barked was i pastoral divisions, for grazing purposes for sheep, although fa also, to some extent, resort to this method of increasing the food for their inferior stock, and even for cows in milking, suppleme the natural grasses with lucerne, sorghum, and other green foods.

POTATOES.

The cultivation of the potato has progressed very slowly. The 1891 saw a marked increase in the industry : but the area plante the season ended 31st March, 1895, viz., 30,089 acres, was the recorded up to that time, and the total yield of 85,270 tons repres the best results yet obtained in the history of the cultivation tuber in the colony. The average yield per acre was, however, 2·83 tons ; in the preceding year it was 3·16 tons—a return whic not been reached since the year 1880. In the three following the dry weather was responsible for small average yields, namely, tons per acre in 1896, 2·70 tons in 1897, and 2·30 tons in 189 the area under crop varied considerably, falling to 24,722 acres in rising to 31,170 acres in the following year—an improvement o 1895 figures only to fall, however, to 23,816 acres in 1898. Th production in 1897 was 84,214 bushels ; but the more unpro season of 1898 witnessed a diminution of 28,882 tons in the crop present New South Wales has to make up by importation fro other colonies a considerable deficiency, which amounted in 1897 to tons net, or nearly 50 per cent. of the total consumption for the e following table illustrates the state of the cultivation of potatoes ie quinquennial periods and years given :—

Period or year ended 31st March.	Area.	Production per annum.	Average yield.
	acres.	tons.	tons.
1863–67	13,864	36,721	2·65
1868-72	15,532	39,465	2·54
1873–77	14,183	42,020	2·96
1878–82	16,979	49,442	2·91
1883-87	14,864	39,254	2·64
1888–92	19,170	52,693	2·74
1893–97	26,208	72,501	2·76
1889	15,409	36,839	2·39
1890	17,551	50,096	2·85
1891	19,406	52,791	2·72
1892	22,560	62,283	2·76
1893	18,502	52,105	2·81
1894	26,559	83,838	3·16
1895	30,089	85,270	2·83
1896	24,722	56,179	2·27
1897	31,170	84,214	2·70
1898	23,816	55,332	2·30

centres of potato cultivation are the counties of Bathurst (prin- y in the Orange and Carcoar districts), Argyle, King, Sandon, en, Clarence, and Durham, and, to a less extent, the other counties coast and table-land districts. On the western slope this root- as hardly any representation at all. Its cultivation is, however, le of very wide distribution throughout the colony; but in many formerly well known for its production it has been largely dis- l by maize and other cereals.

TOBACCO.

h the soil and climate of New South Wales are well fitted for the h of the tobacco-plant, but as it demands for its proper cultivation l knowledge on the part of the grower, it is not so largely cultivated otherwise might be. In the year ended 31st March, 1864, the first n in the subsequent table, there were only 534 acres under cultiva- producing 4,851 cwt. of leaf tobacco. In the following years the area the plant largely increased, chiefly in the agricultural districts of le and the Hunter River valley. Since then the growth of tobacco to have been almost entirely abandoned in the districts where it was ttempted; but it has spread to other parts of the colony, the counties ynyard, Bathurst, Roxburgh, Parry, and Buccleuch, being now the pal centres of production. The greater portion of the tobacco grown 7–8 was obtained in these districts; but its cultivation is chiefly in ands of Chinese, few European agriculturists apparently possessing owledge required for the proper growth and preparation of the leaf. ding to the latest returns tobacco was cultivated on 242 holdings ss than in the previous year. The Census taken on the 5th April, recorded the total number of persons employed in the culture of tobacco as 388, and of these, 379, or 98 per cent., were Chinese fact shows to what a great extent the practice of growing and cu leaf of the tobacco-plant has been abandoned to these aliens.

Between the years 1881 and 1889 the area devoted to the cul of tobacco was enlarged from 1,791 to 4,833 acres, with a corr ing increase in the yield of leaf. As, however, the local product compare favourably with the American leaf, it could not be e profitably: so that a large proportion of the crop remained upon mers' hands, the quantity sold realised very unsatisfactory figu many growers consequently abandoned the cultivation of tob favour of other crops. With the accumulation of stocks of leaf, fall in the price of the local product, the area under the plant resultant yield declined rapidly, and in 1895 the acreage was on and the production 8,132 cwt. In 1896 a great improvemen place, the area under crop increasing to 1,231 acres, and this wa than doubled in the following year, when 2,744 acres, yielding cwt. of leaf, were returned—the largest acreage and productio 1890. This area, however, was reduced to 2,181 acres in 1898, production of 19,718 cwt. The progress of the industry since 18 be traced in the following table:—

Year ended 31st March.	Area.	Production.		Year ended 31st March.	Area.	Product
		Total.	Average per acre.			Total.
	acres.	cwt.	cwt.		acres.	cwt.
1864	534	4,851	9·1	1882	1,625	18,311
1865	807	4,036	5·0	1883	1,815	17,540
1866	1,499	7,469	5·1	1884	1,785	20,036
1867	1,326	2,478	1·9	1885	1,046	9,914
1868	627	6,035	9·1	1886	1,603	22,947
1869	875	7,925	9·1	1887	1,203	13,642
1870	366	3,192	8·7	1888	2,371	23,465
1871	225	700	3·1	1889	4,833	55,478
1872	567	4,475	7·9	1890	3,239	27,724
1873	440	2,751	6·2	1891	1,148	14,021
1874	199	1,261	6·3	1892	886	9,314
1875	539	6,069	11·3	1893	848	8,344
1876	491	4,098	8·3	1894	854	10,858
1877	333	2,440	7·3	1895	716	8,132
1878	399	3,049	7·6	1896	1,231	10,548
1879	835	7,932	9·5	1897	2,744	27,468
1880	592	6,221	10·5	1898	2,181	19,718
1881	1,791	19,469	10·9			

During the year 1897 there was a total consumption of manuf tobacco and cigars of 3,275,614 lb. weight, of which 2,106,052 made in the colony from 876,231 lb. of American leaf and 1,22 of leaf locally grown. The production of leaf for 1898 was lent to 2,208,416 lb., from which a third may be deducted for and waste, and the quantity left, viz., 1,172,277 lb., will probab than suffice for the requirements of the home manufacturers.

ew of the fact that few countries are better favoured than New Wales with climate and soil necessary for successful cultiva- is a matter for regret that the industry has not made more tory progress. This has been due partly to the producer and to the market. With an improvement in the quality of the leaf, al consumption could be rapidly overtaken, and the surplus pro- n would then have to be placed on the English or foreign markets, it would enter into competition with tobacco having a well- ished reputation, and a flavour for which continued use on the f the consumer has created a predilection. Still, that is a question e future: there is ample scope for the present in improving the y of the product sufficiently to satisfy the local consumer. An ssion has prevailed that it is not possible to produce tobacco of quality in New South Wales. This probably arose from experience roduct which, as likely as not, was grown in unsuitable soil, and haracterised by a lack of care in cultivation. The first consideration grower seems to have been a heavy yield, the result being a rank, g. ill-flavoured tobacco. At the Government experimental tobacco which was established at Moonbi for a few years, tobacco of tional quality, highly suitable for cigarettes, was grown, some of eaf realising 1s. per lb. from the manufacturers, and it as well to mber that, owing to the unfavourable seasons and other causes, the riments at the farm were carried on under difficulties. There is no t that it is possible to grow in the colony a tobacco well suited to English market; and if a regular supply were available, properly ated and packed, a large trade might be developed.

SUGAR-CANE.

e first returns in which mention is made of the cultivation of sugar-cane and the production of sugar in New South Wales only from 1863-4. In that season two acres were recorded as ng produced 280 lb. of sugar, and it will appear strange that out of quantity 220 lb. were stated to be the produce of one acre of cane, n in the northern part of the county of Bathurst, while the remain- 60 lb. were produced on the banks of the Macleay River. The ict last mentioned may be considered as the principal seat of the stry during its earlier stages; but it proved to be unsuitable to the th of the cane, and the risk of failure from frosts compelled the ers to keep more to the north. In a few years the richest portions e lower valleys of the Clarence, the Richmond, the Tweed, and the swick were occupied by settlers engaged in planting and growing ane. Mills were erected in the chief centres of cane-cultivation. ane-growing and sugar-manufacturing are now the principal and established industries of the north-eastern portions of the colony. though frosts are not altogether unknown even on the Tweed, the nd climate of the valleys of the northern rivers are in most respects well adapted to the successful cultivation of the sugar-cane, an confined principally to the valleys of the Richmond, Tweed Clarence Rivers. Nearly the whole of the area under this cr within the counties of Rous, Clarence, and Richmond.

The following table shows the progress of this industry duri last twenty-two years. The figures relating to the area yearly under cane are given for earlier dates, but the number of to duced cannot be ascertained prior to 1877. As sugar-cane is annual crop, the area under cultivation has been divided, as practicable, into productive and non-productive, the former repres the number of acres upon which cane was cut during the seaso the latter the area over which it was unfit for the mill, or allo stand for another year:—

Year ended 31st March.	Area.			Production of Cane	
	Productive.	Non-productive.	Total.	Total.	Av per
	acres.	acres.	acres.	tons.	to
1864	....	....	2	....	....
1865	....	....	22	....	....
1866	.. ..	....	141	....	....
1867	....	....	116	....	....
1868	....	....	647	....	....
1869	....	....	2,584	....	....
1870	....	....	3,917	....	....
1871	1,475	2,607	4,082	....	....
1872	1,995	2,399	4,394	....	...
1873	3,470	2,001	5,471	....	....
1874	3,565	3,105	6,670	....	....
1875	4,087	4,453	8,540	....	...
1876	3,654	2,800	6,454	....	....
1877	3,524	3,231	6,755	99,430	2
1878	3,331	3,735	7,066	99,978	3
1879	2,949	4,489	7,438	104,192	3
1880	3,675	4,102	7,777	126,119	3
1881	4,465	6,506	10,971	121,616	2
1882	4,983	7,184	12,167	128,752	2
1883	6,362	7,176	13,538	169,192	2
1884	7,583	7,401	14,984	204,547	2
1885	6,997	10,520	17,517	105,323	1
1886	9,583	6,835	16,418	239,347	2
1887	5,915	9,202	15,117	167,959	2
1888	8,380	6,907	15,287	273,928	3
1889	4,997	10,284	15,281	110,218	2
1890	7,348	11,382	18,730	168,862	2
1891	8,344	12,102	20,446	277,252	3
1892	8,623	13,639	22,262	185,258	2
1893	11,560	15,191	26,751	264,832	2
1894	11,755	16,357	28,112	252,606	2
1895	14,204	18,705	32,909	264,254	1
1896	14,398	18,529	32,927	207,771	1
1897	18,194	12,859	31,053	320,276	1
1898	12,936	12,929	25,865	269,068	2

he figures contained in the above table show the gradual progress of sugar-growing industry from the small beginnings of 1864. From starting point of this cultivation there was but one single break (that 1876) in the yearly increase of land put under cane until 1885. ring the four succeeding years there was, however, a retrograde dency, and the area cultivated in 1889 was less by 2,236 acres, or 7 per cent., than that cultivated in 1885. The low price of the le and the disturbed state of the markets of the world a few years forced the sugar-manufacturers to correspondingly reduce the price d for the cane, and so caused for a time the abandonment of cultivation by the small farmers, who found in the growth of maize variable results for their labour.

In 1890 there was an increase in the area under cane of 1,213 acres the area similarly cultivated in 1885, the year for which, up to time, the highest acreage had been recorded. From 1890 to 1896, area increased from 18,730 acres to 32,927 acres, but in 1897 it fell 1,053 acres, and the 1898 returns show a further drop to 25,865 ns. In 1896-7 the record production of 320,276 tons of cane was tained; but the average production per acre was only 17·6 tons—with exception of that of 1895–6 and of 1884–5, the lowest yield recorded. e cane disease which has been prevalent, principally on the Clarence, ounts for the low averages for the past seven years, while in 1895–6 crop was also damaged by frost. The crop of 1897–8, from a ductive area of 12,936 acres, was 269,068 tons, or an average of 8 tons to the acre, which is a slight improvement on the figures of preceding three years. A heavy yield is expected from the coming p.

Sugar-cane is generally cut in the second year of its growth, the lds being replanted after they have given crops for three or four sons at the most; and, as the planting of cane has been conducted irregular intervals, it has chanced that seasons of large production ve been followed by small crops in the succeeding year. This accounts the alternately large and small areas of productive cane during any years, as shown in the preceding table. Sugar-manufacturers variably purchase the year's crop of cane standing and cut it at their n cost. From plantations in full bearing the average weight of the ne cut varies from 25 to 32 tons, while the price paid ranges from 8s. 13s. per ton. For the season 1898 the leading buyer has fixed the ice for the standing two-year old cane at 9s. 10d. per ton. This is siderably lower than in previous seasons, and is due to the operation the tariff. The average cost of cutting the cane may be set down at 2d. per ton.

The county of Rous is now the principal centre of sugar-cane culti tion, containing 797 holdings, covering 15,989 acres, devoted to the duction of sugar—an area comprising over three-fifths of the total eage in the colony under cane crops. The yield obtained from 8,974 res of productive cane amounted to 189,573 tons, showing an average

of 21·1 tons per acre. In the county of Clarence there were, in 1
511 holdings on which cane was grown, the aggregate area being
acres. In this, as in the other sugar-growing counties, the m
of the farmers cultivate sugar-cane in addition to other crops, an
a few estates are entirely devoted to its production. Some planter
areas of 25 to 100 acres in extent under cane, but their num
limited. The yield in the county of Clarence was 50,173 tons,
average of 18·2 tons per acre, cut on an area of 2,763 acres.
county of Richmond the holdings under sugar-cane numbered 17
aggregated 2,567 acres, of which 1,189 acres were cut, giving a
yield of 29,139 tons of cane, or an average of 24·5 tons to the
The total number of holdings on which sugar-cane was cultivate
1,487.

The total consumption of sugar in New South Wales during th
1897 amounted to 62,440 tons, of which 34,955 tons were the p
of the local plantations. The quantity treated by the refineries
colony, including imports, during the twelve months was 43,22
On the estates belonging to the Colonial Sugar Refining Compa
conduct of the business has been entrusted to practical men, a
money has been spared to obtain the most approved and co
plant for the manufacture of sugar. The company's works o
Richmond River are among the most complete in the world, a
sugar manufactured is equal to the best Mauritius and West
samples.

MINOR ROOT CROPS.

Among the minor root crops may be mentioned turnips, ma
wurzel, onions, arrowroot, chicory, and beetroot. In addition to
according to the agricultural returns collected during the season 1
there were gathered £17,745 worth of miscellaneous crops, cult
on 1,228 acres; and among these were some small areas,
insignificant in their independent acreage, upon which is grown
every agricultural product mentioned in this chapter.

The most important of the minor root crops is that of turnips,
show a total production of 2,133 tons from 414 acres. Mangold-
gave, from 55 acres, 128 tons. Onions, properly speaking a bul
were grown on 381 acres, and the yield was 921 tons. Like many
products grown on small areas, onions receive little attention,
apparently regarded more as a "chance" crop, whereas more ti
care given to one or two acres of onions would yield a return e
that of 20 or 30 acres of the usual farm crops. Though the
average yield of onions does not reach 3 tons per acre, good f
have obtained a yield of 10 or 12 tons, which in the early mark
realised as much as £15 per ton. The net importations of on

nounted to 97,083 cwt., valued at £31,783; while the local
on was only 19,820 cwt., of the value of £5,760. The necessity
ortation is certainly not due to the unsuitability of the soil for
ivation of this vegetable.

97-8 there were 14 acres under arrowroot, viz., 11 acres in the
of Rous, 1 in Parry, 1 in Buller, and 1 in Raleigh. The
yield is of the value of about £30 per acre. Excellent
in the cultivation of arrowroot have been obtained at the
gbar Experimental Farm, near Lismore. A mill for the
nt of arrowroot has been erected on the Richmond River,
a result of the cheaper means of preparing the product it
ipated that the extent and value of the crops will be increased.
1897 the net import of arrowroot was 157,359 lb., valued at

many years the Sydney market was supplied with chicory grown
Blayney district, but its cultivation was afterwards abandoned.
hicory roots are worth, on an average, £5 per ton, delivered
ney. The yield per acre ranges from 8 tons in a favourable
to 1 ton in a very dry season. With irrigation, 6 to 8 tons
e can be relied on. The amount of roots annually consumed
South Wales is about 1,000 tons, equal to 160 tons of pre-
chicory. In addition to the value of the root for chicory,
excellent forage crop for dairy cattle. The net imports of
during 1897 amounted to 208,068 lb., representing a value of

many agriculturists the sun-flower has lately become quite
ablished crop. The seed or grain is highly valued as food for
, and for this purpose the average return during last season
high as £15 per acre. Oil can also be extracted from
d, but for this there is at present no demand. The plant
successfully grown in all parts of the colony, and as it
s little attention beyond keeping the crop clean it is very remu-
e.

sugar-beet, the cultivation of which in France and Germany has
l enormous proportions and has become a staple industry, has
d some attention during late years both in New South Wales
Victoria. In Victoria the Department of Agriculture made
areful analyses of different varieties of locally-grown beets, with
st satisfactory results. A good beet should show not less than
r cent. of sugar, but those tested by the Department yielded
14·87, 15·25, and 15·61 per cent. respectively. So satisfactory
did the prospects of establishing the industry in the colony
that the Government passed an Act under which the Treasurer
powered to advance money on easy terms for the purpose of
hing mills for the production of sugar from beets; and one
is now in operation.

The results of the tests of roots made in Victoria were, h greatly exceeded by those furnished by analyses of beets grown Tenterfield district of New South Wales. The chemist of the (Sugar Refining Company, at the request of a local beet-grower, series of tests, the yield per root from those analysed being resp 15·66, 16·08, 17·89, 19·51, 19·90, 20·13, 20·33, 20·56, 22·11, 22· 24·75 per cent. Experts pronounced such yields to be unparal the history of the cultivation of the beet; and there was, in conse a movement in favour of testing this branch of agriculture i districts unsuited to the growth of the cane, special attentio directed to the matter in the Tenterfield district, where the proje practical shape. Experiments have been conducted on an im scale, and with such satisfactory results that efforts are now bein to establish a factory in the New England district in connectic the industry. In addition to its value as a sugar product, the beet is an excellent fodder for dairy cattle, and in the colde of the colony would be a profitable crop for this purpose cost of production in New South Wales is estimated at about per acre, the return being worth approximately £12 16s. the cultivation of the beet for sugar production fulfil but h expectations of its promoters, there is little doubt that it will modify agriculture in the colony, and add another profitable to the country's resources.

LENTIL CROPS.

There were, during the season 1897-8, under crop to peas and 252 acres, which gave a total yield of 7,185 bushels. The division of the colony contained 193 acres devoted to this cr the yield was recorded as 6,314 bushels. The northern coast yielded 458 bushels from 15 acres; the valleys of the Hunter a Hawkesbury Rivers, 3,852 bushels from 117 acres; the metro county of Cumberland, 1,578 bushels from 31 acres; and the so coast district, 126 bushels from 30 acres. The area under this c the table-land was 48 acres, and the yield 646 bushels; to the northern district contributed 165 bushels from 7 acre central, 362 bushels from 22 acres; and the southern, 119 from 19 acres. The western slope had under this crop only 11 yielding 225 bushels; while on the western plains the crop w cultivated.

The peas and beans herein described were grown mainly a fodder for horses, and must not be confounded with the peas an cultivated in the kitchen and market gardens for table use a tables. Peas are gathered when perfectly dry, and constitute state excellent fattening food for pigs being prepared for the kni ition to the green peas grown in market-gardens, which are in market-garden produce, 279 acres were cropped on farms, total yield of 10,374 bushels.

GOURD CROPS.

rea devoted to pumpkins and melons during the season 1897-8 32 acres, and the yield 18,671 tons. The principal places of on are the maize districts and the metropolitan county. In the district the area was 3,352 acres, and the production 12,934 which the valleys of the Hawkesbury and Hunter Rivers gave ns from an area of 1,376 acres; the northern counties, 2,484 n 630 acres; and the county of Cumberland, 3,969 tons from es. The area under gourd crops on the table-land was 1,694 rom which 4,491 tons were produced; and on the western slope ere 364 acres which yielded 1,160 tons. On the western plains as a small area of 23 acres under this form of cultivation, with of 86 tons.

pkins and melons are grown principally for table use as vege- and as a jam staple; but they are also used extensively as fodder le and pigs. The number of acres under gourd-vines mentioned s somewhat below the truth, as there was no doubt a large area luction which was never returned, the custom being to plant in and melon seeds in orchards and vineyards between the rows -trees and vines.

MARKET-GARDENS.

897-8 there were in the colony 1,824 holdings, comprising 6,384 ultivated as market-gardens, the average size of each garden 3½ acres. The value of the production for the year was set at £151,919, and the number of persons employed in this branch tivation was probably about 7,000, the greater number being e; indeed, the market-garden in Australia is seldom termed he generic appellation being "Chinese" garden. At the Census in 1891 there were returned as following the calling of market- ers, 5,101 persons, of which number 3,841, or 75·3 per cent., hinese; of 3,131 domestic and other gardeners, 405, or 12·9 per of 542 vegetable hawkers, 403, or 74·4 per cent.; and of 309 rocers 144, or 46·6 per cent., were of the same race. This is ce emphatic enough, if such were needed, as to the monopoly Chinese of the occupation of market-gardening and vegetable- ing in New South Wales.

The subjoined statement exhibits the number, area, and value duction of market-gardens in each of the great divisions into the colony has been divided:—

Division of the Colony.	Market-gardens.	Area.	Val Prodı
The Coast—	No.	acres.	
Northern District	182	369	
Valleys of the Hunter and Hawkesbury Rivers.	258	659	1
County of Cumberland and the Metropolis.	717	2,992	
Southern District	120	410	
Total	1,277	4,430	11
The Table-land—			
Northern District	99	250	
Central „	169	718	1
Southern „	118	449	
Total	386	1,417	2
The Western Slope—			
Northern District	46	227	
Central „	10	41	
Southern „	47	151	
Total	103	419	1
The Western Plains	58	118	
Grand Total	1,824	6,384	15

One branch of gardening, namely tomato-culture, has not yet re that attention which its importance warrants. The possibilitie large local trade, together with an export trade of very consid magnitude, have not yet been fully grasped. There is an and continually increasing demand for sauces, jams, and pre of tomato, and the foreign supply is by no means so good cheap as to render competition difficult. In the future, perhaps of many acres in extent will be planted with tomato-vines, as the are with grape-vines, and numbers of people will be employed manufacture of tomato sauce, and in canning the fruit. Both c and soil are favourable, and tomatoes grown in New South compare to advantage with those produced in their native habitat its cultivation entails only light labour, and it is particularly rem tive, the vegetable could be grown by persons unaccustomed to h labour on farms, and it is somewhat surprising that its culti should be left so exclusively to the Chinese.

VINES AND WINE PRODUCTION.

most every part of the colony, with the exception of the sub-
portion and the higher parts of the mountain ranges, grape-
rive well, and bear large crops of succulent fruit, equal in size,
ance, and flavour to the most renowned products of France, the
ands of Germany, and Spain. Nevertheless, the vine-growing
ne-manufacturing industries are still in their infancy, though
growing local demand, and the opening up of a market in
ıd, where the wines of New South Wales, in common with those
other Australian colonies, have obtained some appreciation, the
of grape culture in this country appears to be fairly assured.
esent, however, the production of the whole of Australia is
ratively insignificant, as will appear from the following table,
ıg the vintage of the world for 1897 : –

Country.	Production in million gallons.	Country.	Production in million gallons.
	728	Greece	27
	485	Bulgaria	24
	447	Servia	20
	83	United States	19
nia	72	Brazil	8
	66	Australia	6
y	62	Azores, Canaries, and Madeira	5
al	56	Tunis	4
	56	Cape Colony	2
ny	47	Mexico	2
	40	Persia	1
	33		
ine Republic	30		
rland	28	Total	2,351

vine was planted in the early days of colonisation in New South
s, but it was not until the year 1828 that vine-growing and
making may be said to have been fairly established. In that year
Busby returned from Europe with a large collection of cuttings from
most celebrated vineyards of France, Spain, the Valley of the Rhine,
other parts of the Continent of Europe; and planted on his estate

at Kirkton, in the Hunter River district, a vineyard, which ha
the nursery of the principal vineyards of the colony. Some
afterwards the vine was planted in the Murray River Valley a
other districts, and was found to flourish so luxuriantly th
manufacture of wine received considerable attention. For a time
ever, the prospects of this industry seemed very discouraging, a
production was considerably diminished, owing partly to the wan
market, and partly to the fact that the wine-makers, many of
were not vignerons by training, possessed only a limited knowle
the manufacture of wine, and produced at first an article of inferi
unsaleable quality. In the principal vineyards in the Valleys
Murray and Hunter Rivers, however, neither pains nor money ha
spared to introduce skilled labour, and to put up presses, vats, and
manufacturing appliances of the most approved kinds.

The results of such intelligent treatment became apparent when
were awarded to the wines of New South Wales at the Paris Exhi
of 1878, followed by an unbroken series of successes at the Exhib
of Philadelphia, Sydney, Melbourne, and Amsterdam; and still
recently at the Indian and Colonial Exhibition in London. But no
was the general excellence of the wines of the colony more
recognised than at the Bordeaux Exhibition of 1882. There, i
principal centre of the wine trade of the world, some of the wi
New South Wales were classed, by the most competent judges, i
category of *Grands Vins*, and their value fully appreciated
established. Again, at the World's Fair, held in 1893, at Ch
an international jury of experts pronounced the wines of New
Wales to be equal to many of the finest viticultural productions
noted wine-growing countries of Southern Europe. The opinio
expressed, however, that the practice of labelling Australian wine
European names was to be deprecated, as they possessed many exc
and distinctive characteristics sufficiently peculiar to justify the
tion of a new and descriptive system of classification.

Notwithstanding the winning of exhibition medals and
approval, the export of the wines of the colony has not yet re
an important figure. Among other causes which retard the accep
of Australian wines by English markets, may be mentioned the pr
of shipping the product at too early an age, and the imposs
of obtaining from the shippers details respecting the vintage
particular wine. It is, moreover, alleged that when certain ship
of wine arrived in England they were often so badly looked
as to be actually unsound before being shown to the wine men
Foreign experts find fault also with the method of casking, and
mend the preliminary treatment of wine in Australia, as it is t
in Bordeaux, with cool cellarage, fining, racking, and blendin
two years and a half to three years prior to its leaving the country
doubt much of the success of New South Wales as a wine-exp
country will depend on the adoption of more advanced metho

ral employment of European experts in wine-making, and rise of the vignerons in properly advertising their productions ing them sufficiently before the notice of the British public. al imports of all Australian wines into the United Kingdom d by the Board of Trade returns for ten years, were as fol-

Gallons.	Year.	Gallons.
233,000	1893	555,000
307,000	1894	399,000
314,000	1895	613,000
382,000	1896	610,560
461,000	1897	713,869

sibilities of the wine trade, correlative with an improvement in ure, may be appreciated from the following figures, which some detail the imports of wine into the United Kingdom e year 1897. The quantities represent both wine in cask and :—

untry.	Gallons.	Country.	Gallons.
	6,605,077	United States	178,539
	4,283,054	Madeira	125,268
	3,957,505	British South Africa	10,221
a	713,869	Other countries	155,393
	691,002		
	447,648	Total	17,559,284
	391,708		

total quantity imported, there were 12,096,211 gallons of red. 3,073 gallons of white wine. The imports from France com- 393,469 gallons of red, and 2,211,608 gallons of white wine; the rom Portugal, 3,941,442 gallons of red, and 16,063 gallons of d those from Spain, 2,337,669 gallons of red, and 1,945,385 f white wine.

ons have been much exercised recently with the problem of arization of wines for export. By this process the wines are sub- a temperature of from 140° to 150° Fahrenheit, thereby fixing cteristics of a product, annihilating the destructive germs that deterioration, and making it impossible for them to reinvade hitherto the experiments in this direction have been only

be seen from the preceding table that the export of the wines outh Wales, about which so much has been written, does not give very encouraging results; in fact, the trade is a very , and has decreased from 54,143 gallons sent away from the 1891 to 23,936 gallons in 1897. The quantity sent last year to

2 A

the United Kingdom direct amounted to only 3,253 gallons, or 1 gallons less than that exported in 1893, when the export amoun 17,941 gallons. During some years a considerable quantity of sent away in wood from the Albury and Riverine districts to the bouring colony of Victoria, presumably for shipment at Melb In 1891, when the export of the wine produced in New South amounted to 54,143 gallons, the trans-Murray consignments to 38,548 gallons of the quantity exported. This intercolonial afterwards dwindled to insignificant proportions, but is again bec noticeable, while the direct shipments to Europe from the other p the colony are declining.

In the following table will be found particulars of the export in wine locally produced, for the five years extending from 1 1897 :—

Country.	1893.	1894.	1895.	1896.
	gallons.	gallons.	gallons.	gallons.
United Kingdom	17,941	12,038	6,249	6,394
Victoria	298	7,162	4,156	5,636
New Zealand	1,174	2,082	3,500	1,934
India and Ceylon	1,002	2,292	2,339	442
Queensland	1,751	2,487	2,239	1,881
South Sea Islands	1,363	1,704	2,019	3,496
British New Guinea, Singapore, Java, the Philippine Islands, the Straits Settlements, and Siam	4	404	619	595
Tasmania, South Australia, Western Australia, and Norfolk Island	135	254	201	2,020
New Caledonia	1,510	379	88	2
Japan, China, and Hong Kong	32	867	80	28
France, Belgium, Germany, Italy, and Norway	193	94	67	1,743
Canada and the United States	365	623	......	8
Egypt, South Africa, and the Mauritius	......	......	......	......
Total	25,768	30,386	21,557	24,177

During the year ended the 31st March, 1863, the wine produ New South Wales measured 144,888 gallons: in 1866, the prod reached 168,123 gallons: in 1876 it had increased to 831,749 ga in 1886 the production was only 555,470 gallons: in 1896 it re 885,673 gallons: in 1897 it was 794,256 gallons; while the yi 1898 was 864,514 gallons. The highest production was obtained in the quantity totalling 931,542 gallons—67,028 gallons more th 1898, although the area under vines for wine-making in the latte was greater by 314 acres. Vignerons consider 250 gallons per a good yield, but the average yield for New South Wales reach figure only in one year since the establishment of the industry, en the average yield per acre was recorded as 263 gallons. The statement shows the progress of the industry since 1863:—

Total area under vines.	Area under vines for wine-making only.	Production.		Year ended 31st March.	Total area under vines.	Area under vines for wine-making only.	Production.	
		Total.	Average per acre.				Total.	Average per acre.
acres.	acres.	gallons.	galls.		acres.	acres.	gallons.	galls.
1,460	795	144,888	182	1882	4,027	2,597	513,688	198
1,641	880	136,976	156	1883	4,448	2,629	543,596	207
1,849	945	161,299	171	1884	4,378	2,560	589,604	230
2,126	1,243	168,123	135	1885	4,584	2,405	442,612	184
2,281	1,358	242,183	178	1886	5,247	2,876	555,470	193
2,532	1,483	285,283	192	1887	5,840	3,131	601,897	192
3,117	1,917	412,587	215	1888	6,745	3,292	666,382	202
3,907	2,039	460,321	226	1889	7,072	3,596	805,813	225
4,504	2,371	342,674	145	1890	7,867	3,603	688,685	191
4,152	2,466	413,321	168	1891	8,044	3,896	842,181	216
4,090	2,568	451,450	176	1892	8,281	3,846	913,107	237
4,547	3,183	578,985	182	1893	8,264	4,146	931,542	225
4,308	3,077	684,258	222	1894	7,375	4,130	748,929	181
4,459	3,163	831,749	263	1895	7,577	4,475	731,683	164
4,457	3,217	799,709	249	1896	7,519	4,390	885,673	202
4,183	3,027	708,431	234	1897	8,061	4,608	794,256	172
4,237	3,024	684,733	226	1898	8,083	4,490	864,514	193
4,266	3,091	733,576	237					
4,800	2,907	602,007	201		Mean for 36 years ...			202

above figures show that the wine industry has very considerably d during the period under review, the total area planted being arly six times what it was in the year 1863, when it stood at cres, from 795 acres of which grapes were gathered for wine-, the total production being 144,888 gallons. The years 1876, 878, 1880, 1884, and 1892 show the best average yields. The mber of vineyards in 1898 was 1,934. The average area of each d was 4·2 acres; and the area planted with vines still in an ctive state was 944 acres.

nnection with the wine-making industry, there was, during the 1897-8, a manufacture of 10,790 gallons of brandy, which was wever, distilled for consumption as such, but for the purpose of ng wines.

wine industry is unquestionably hampered in its development y things, including phylloxera vastatrix, oidium, anthracnose, lars, and other pests. Phylloxera has caused some damage in neyards of the neighbouring colony of Victoria, seriously ning the stability of the industry, and necessitating stringent ve measures. It has appeared also in some vineyards in the , Seven Hills, and Parramatta districts, but so far without any great ravages, although some alarm exists among wine- touching its development in the future. The knowledge that this pest has obtained a foothold in the colony, however slight i be, has certainly stopped investment in vineyard properties, a greatly damped the enthusiasm of those interested in the wine At present the afflicted areas are confined to isolated patches, b is quite enough to cause the gravest apprehension. A commissic appointed a few years ago to report on the appearance of the d and the best means of preventing its spreading throughout the vin of the colony. The prohibition of the importation of vine-cutting abroad has been in force for some time, and the destruction of in vineyards has been carried out under the direction of the Vine D Board; but vignerons recommend direct legislative action under stringent Act than that at present in operation.

In order to advance the interests of the wine-growing indu New South Wales, experts advise the restriction of the choice of to a few well-tried and sound varieties, careful fermentation, the vation as far as possible of constant types, attractive bottling, moderate price-list which should not make a good product prohi A comprehensive Wine and Fruit Pest Act, and a strictly en Food Adulteration Act, are also deemed necessary; and, for t pose of perfecting the knowledge of vignerons in the manufac wine, it is suggested that a College of Viticulture, on a basis sim that of the Agricultural College, should be established for the p of imparting to intending wine-growers a capable training. Mean the desire of the Government to extend the application of the scientific methods in connection with wine-making and the gene tivation of the vine, and to successfully combat the phylloxera d has led to the appointment of an expert from one of the Eu Viticultural Colleges. Under his direction inspectors have constantly engaged vigorously dealing with infected vineyards, a believed that the steps taken will restrict the disease in its r As a further protection, a large quantity of phylloxera-resistant c have been obtained from France for use as stocks in planting vin

TABLE-GRAPES AND RAISIN-FRUITS.

The culture of grapes is not restricted to the production of fr the purposes of wine manufacture only, for a considerable area is d to the cultivation of table-grapes, particularly in the neighbourh Sydney, and in Ryde, Parramatta, and other districts of C Cumberland. The extent of country devoted to this branch industry in 1892-3 comprised 2.211 acres, with a production of tons of grapes, giving an average of 2·7 tons of fruit per acr 1897-8 the area yielding table-grapes had increased to 2,649 acr the average yield was only 1·6 tons per acre, giving a total prod of 4,230 tons of fruit.

So far no effort has been made in New South Wales to prepare fruits for foreign consumption, although there is an undoubted pos of a large export trade in this direction. In Victoria and a, settlements have been founded at Mildura and Renmark for ose of cultivating, drying, and preserving fruit on a large scale, 'a local and an export trade, similar to the industry as it is d in California, where the lands are artificially irrigated, and ts of nature are seconded by the discoveries of modern science ients made in drying grapes and currants of Australian culture t with success in the London markets, and experts have declared uct to be of the highest quality. New South Wales is, perhaps, re favourably situated for the prosecution of this industry than the sister colonies, and with the extension of settlement, and ng out of cultivation of such products as are more cheaply grown and more suitably climatic parts of the world, the building up ge export trade in raisins, muscatels, dried currants, figs, and ples peculiar to the isles of the Levant and the Grecian peniny confidently be expected.

CITRUS FRUITS.

ultivation of the orange and the lemon has become one of the l industries of the districts surrounding the metropolis. The nge groves were planted near the town of Parramatta, and soon o the neighbouring districts of Ryde, Pennant Hills, Lane Cove, le of Central Cumberland, the valleys of the Hawkesbury and Rivers, and the slopes of the Kurrajong Mountains.

stics relating to this branch of fruit culture are available only e year 1879. At that date the area under oranges and lemons orded as 4,287 acres; this had increased in 1898 to 13,943 acres, ng a productive area of 10,097 acres, with a yield amounting to 00 dozen oranges. In 1894, from a productive area of 8,661 early 10½ million dozen oranges were obtained; but the last few have been unfavourable to the orchardists. It is estimated r 3,000 dozen of fruit to the acre can be obtained in an average rom fair sized trees in full bearing, and it is therefore probable figures returned by the growers include the production of a able number of young trees. The number of orangeries culti- uring the year 1897-8 was 2,102, and of these the average area r 6·6 acres. The state of the industry in each year since 1879 in the subjoined statement:—

nding arch.	Area of Orangeries. Acres.	Year ending 31st March.	Area of Orangeries. Acres.
	4,287	1889	10,851
	5,106	1890	9,804
	5,939	1891	11,288
	6,301	1892	11,370
	6,716	1893	11,158
	7,268	1894	11,967
	6,911	1895	12,204
	7,733	1896	11,956
	7,920	1897	12,490
	8,875	1898	13,943

The production of oranges has already attained such proportions th the growers are obliged to seek markets abroad for the disposal of th produce, as the demand, both in New South Wales and in the adjac colonies, is in some seasons exceeded by the supply. Efforts have late been made to open up a market in England, as the fruit can delivered in London at a time when the supply of oranges from Sp and other countries of the northern hemisphere has ceased. An exp mental shipment of New South Wales oranges was made by the Bo of Exports in the course of 1896, the result being generally regarded very satisfactory. The fruit were landed in London in the month September, when the market was rather bare, the season for Denia Valencia oranges—which form the chief supply of the metropoli beginning about the middle of October and lasting till the end of J The packing was generally good—the appearance of the fruit which w well and firmly packed in white paper was declared to be satisfactor but the agents in whose hands the shipment was placed for dispo recommended the use of tissue paper only for packing, and avoidance of soft shavings, sand, and pumice dust. Of the 1,740 cas 15 were taken in the hold of the mail steamer "Ophir," and th opened unsatisfactorily. The remaining 1,725 cases were carried in cold-storage chambers of the vessel, and the freight was consequen very high, averaging for the whole shipment 3s. 11d. per case. Desp this heavy charge, however, a net profit of £143 10s. 7d. was clea on the transaction, equal to a return of 14·7 per cent. The fruit c £487 10s. 6d.; freight amounted to £343 13s. 4d., and other charges £168 12s. 1d.; making a total sum of £999 15s. 11d., which was redu to £968 4s. 7d. by returns from the sale of culls, etc. The orang realised £1,195 15s. 6d., from which fell to be deducted £84 0s. for commission and charges in London, leaving the proceeds £1,111 15s. 2d., or, as already stated, £143 10s. 7d. in excess of th total cost.

Encouraged by the success of this shipment by the Board Exports, business on a much larger scale was attempted by merch during 1897, about 36,000 cases being shipped by various steam during the season; but from some cause, as yet imperfectly ascertain no less than four out of six cargoes were found to have suffer damage to such an extent that serious losses were incurred. Fro the report of the expert who superintended the unpacking, who speaks in strong terms of the conditions under which the fru was carried, the inference is that proper care was not taken with cargoes, and that heating and decay ensued as the result of subj tion to wrong temperature. The condition of the fruit also point to careless handling on the part of senders, on whom it may impressed that it is quite useless to send to London any other th first-class fruit, properly cut, cured, and handled, and carried temperature low enough to prevent premature ripening and consequ rapid decay. The fact has been established, however, that under pro

ns New South Wales growers can land fruit in good order ; and
posed to make further experiments during the approaching

xport of oranges, in view of the possibilities of a large trade
ngland, may be said to be in its infancy. Generally speaking,
le with the other colonies has not met with very great success,
o imperfect sweating and bad packing. Experts declare that in
itrus fruits for export, the shrinkage is not more than from 15 to
ent., and that to pluck crops in June and July and so treat them
y relieves the tree of a burden of fruit during the period when
yield is preparing, but obviates the glutting of the local market
ripened product. If the fruit is suffered to hang until December,
in on the tree is excessive, and its vitality is seriously impaired.
oreover, stated that the neglect on the part of growers of citrus
New South Wales to pull and prepare the early product has
in the lemons grown in this colony being driven out of the
of Victoria and New Zealand by cured Sicilian and Mildura
s. In 1897 the total export of oranges was estimated at 6,500,000
The stringent regulations enforced by all the colonies with the
f preventing the introduction of fruit pests have militated
the intercolonial trade, but the permission now given to land
which have been treated with the fumes of hydrocyanic acid
n opened the ports, and with the eradication of the insect and
pests an era of prosperity may be opened up to fruit-growers.

s are now being made to establish co-operative cordial factories,
object of making orange wines and liqueurs from the windfalls
ty fruits ; and if measures be taken to handle the fruit for
on co-operative lines also, and to have the curing, grading, and
done under expert supervision, the future of the trade will be
especially if the worn-out trees be gradually replaced with
tocks, and due consideration given to systematic methods of
ion and fertilising. It is hoped also that in time there may be
ed, in connection with the orangeries of New South Wales,
tories for the preparation of candied citron, orange, and lemon
well as of oils and essences of citrus fruits. The crystallisa-
mandarins may likewise be an industry of profitable future
ion; and with the introduction and acclimatisation of the
range there should be no reason why Sydney should not rival
in the production of marmalade. Unfortunately, the proverbial
ism of the Briton to the culture of any fruit, cereal, or fabric-
known to the climatic zone of his native land, has hitherto
ly operated against the introduction of many vegetable staples
xperiment and experience have amply demonstrated would
luxuriantly in Australia, to the advantage both of the individual
he community.

ORCHARDS AND FRUIT GARDENS.

For some years past there has been but little increase in the a under orchards and fruit gardens. In 1889–90, the year when or and land under cultivation to dessert and other fruits, exclus orangeries and vineyards, were first distinguished from gardens de to the cultivation of vegetables and general market-garden pr the total area so tilled amounted to 18,867 acres, and of this area acres were situated in the metropolitan county of Cumberlan the agricultural year ended 31st March, 1898, the area sin cultivated amounted to 31,019 acres, showing an increase durin eight years of 12,152 acres. The area under orchards and fruit ga in the county of Cumberland, including both productive and u ductive holdings, is now 13,964 acres, or an increase of 6,797 ac the figures of 1890. Notwithstanding this advance, the fruit-pr tion of New South Wales is still far behind the demands of loca sumption. The colony, therefore, is obliged to import large quan the greater part of which could be successfully grown within it boundaries. Leaving out of the question the considerable import of tropical fruits from Fiji, the South Sea Islands, and Queen (and some varieties could most certainly be cultivated in the tr portion of New South Wales), the introduction of fruit from r is still greatly in excess of the moderately-estimated possibilit local production.

The following table shows the area under orchards and fruit-ga exclusive of orangeries and vineyards, together with the total va each year's yield, for the period during which statistics relative t cultivation have been collected:—

Year ended 31st March.	Area of Productive Fruit gardens and Orchards.	Area of Fruit-gardens and Orchards not bearing.	Total area cultivated for Fruit-gardens and Orchards.	Total value of the Production of Fruit-gardens and Orchards.	Appro averag per
	acres.	acres.	acres.	£	£
1890	14,342	4,525	18,867	185,012	12
1891	16,081	6,274	22,355	213,934	13
1892	16,606	7,424	24,030	211,790	12
1893	18,117	8,163	26,280	229,425	12
1894	19,330	7,663	26,993	197,374	10
1895	21,465	8,258	29,723	175,473	8
1896	20,635	8,145	28,780	130,735	6
1897	24,031	8,524	32,555	159,715	6
1898	23,965	7,054	31,019	155,534	6

From the foregoing table it will be seen that the value of th production was highest during the season 1893, but the appro average value per acre was highest for the year 1891. The agric season 1896 showed a decline in the value of the total produc orchards and fruit gardens of £44,738 from that of the pr

. to £66,639 from that of 1894, and to £98,690 from that of year 1893; while the approximate average value per acre of the on declined by £1 16s. from that of 1895, and by £6 19s. from of 1891, the year showing the best returns in this respect. In 7, however, there was an improvement to the extent of £28,980 he total value, and of 6s. per acre in the average value; and the l production and average value were only a trifle lower in the season 8. The approximate average annual value for the nine years nding from 1890 to 1898 was £9 10s. per acre. It will be noticed while there has been an advance in the productive area, that ribed as not bearing appears to have remained for several years ast stationary; the total amount of new land put under orchard and t crops, other than oranges, lemons, and grapes, during the eight rs ended 31st March, 1898, was, however, recorded as 9,652 acres, an average of 1,206 acres per annum. The subjoined statement ws the amount of acreage of the productive area under fruit-gardens orchards for each of the nine years under notice, the acreage ed from year to year from areas previously not bearing, and the land put each season under this form of cultivation:—

r d t h.	Productive area of Fruit-gardens and Orchards, from preceding year.	Area added from Fruit-gardens and Orchards previously unproductive.	Total Productive Area.	Area of Fruit-gardens and Orchards not bearing, remaining from previous year.	New land put under cultivation to Fruit-gardens and Orchards.	Total area not bearing.	Total area under cultivation to Fruit-gardens and Orchards.
	acres.	acres.	acres.	acres.	acres.	acres.	acres.
)	14,342	......	14,342	4,525	......	4,525	18,867
	14,342	1,739	16,081	2,786	3,488	6,274	22,355
!	16,081	525	16,606	5,749	1,675	7,424	24,030
	16,606	1,511	18,117	5,913	2,250	8,163	26,280
	18,117	1,213	19,330	6,950	713	7,663	26,993
	19,330	2,135	21,465	5,528	2,730	8,258	29,723
	21,465	*830	20,635	8,258	*113	8,145	28,780
	20,635	3,396	24,031	8,145	379	8,524	32,555
	24,031	*66	23,965	8,524	*1,470	7,054	31,019
al	....	9,623	....	....	9,652	....	....

* Gone out of cultivation.

rom the figures just given it will be seen that 9,623 acres have been ed to the productive area, during the period, out of 9,652 acres of land put under cultivation.

or the year 1897 the value of the imports of bananas, principally Queensland, the New Hebrides, and Fiji, amounted to £71,323; ine-apples, nearly all of which came from Queensland, to £5,639; ther green fruit, mostly from Tasmania, to £161,144; of dried and lied fruit—including currants and raisins (£90,826), dates (£16,125), anuts and other edible nuts—to £133,705, of which the United

Kingdom supplied £45,199 ; and of bottled fruits and fruit boiled in pulp, to £11,390 ; or a total for the year of £383,201. From t must be deducted the value of the re-exports of foreign-grown fr from New South Wales during the same period ; and this amounted £40,090, including green fruits of various kinds to the value of £20,6 The net value of the importations of foreign-grown fruit into N South Wales during 1897 was, therefore, £343,111, or £22,911 hig than in the preceding year, £124,158 higher than in 1895, and £146, higher than in 1894. The export of locally-grown fruit during 18 amounted in value to £90,223, which was almost wholly made up green fruit, the chief customers of the colony being Victoria, Quee land, and New Zealand. The value of the domestic production the agricultural season 1897–8, including oranges and grapes for t use, may be set down at £281,000 ; the value of the imports for year 1897 was £383,201, and of the exports £130,313. The to consumption of fruit for the year was, therefore, valued at £534,0 or £16,000 more than that of 1896. The colony's contribution fruit to its own wants was valued at £191,000—an amount show a decrease of £7,000 from the figures for 1896.

If to the results just given be added the net imports of canned frui jams and jellies, ginger, and other preserves of foreign production, t balance of exchange in fruit commodities will be further modifie The net imports of these commodities may be set down for 1894 a £14,410 ; for 1895 at £8,630 ; for 1896 at £28,220 ; and for 1897 a £28,600. The imports for local consumption of all fruits and fru products, fresh, dried, canned, candied, preserved, boiled, in pulp, an bottled, would amount, in 1894, to £210,838 ; in 1895, to £158,797 ; i 1896, to £248,328 ; and in 1897, to £281,488—a sum which is far to large, in view of the colony's natural resources both of soil and c climate. It must be admitted that New South Wales is far in the rea as a fruit-producing country, and the names of the lands from whic she derives so large a portion of the fruits and fruit-products locally consumed are convincing of the fact, seeing the range of climate an varying qualities of soil possessed by the colony, which are in many cases also identical with those of the fruit-importing countries mentioned, that, with some few exceptions, there could be produced all th fruit demanded for local consumption.

Fruitgrowers, however, may look beyond the prospect of supplyin the country's requirements in fruit products with those locally grow The success which has attended the export of fruit from Tasmania ha shown orchardists in this colony that they may find it more profitabl to grow with a view to exporting to England than to place their produ in a glutted market at home ; and it needs only a few successes in Londo to cause a development of the trade. During the past few years the dri fruits prepared at Mildura have made a good impression in Englan and demonstrated the possibility of profitable trade, provided all th primary conditions of careful curing and packing are scrupulously tingly fulfilled. Victoria has recently opened up an experi- exportation of apples to Java and Singapore; and shippers in the uring colony consider that they have discovered an ideal packing l in the shredded bark of the tea-tree, which has been used also eat success as a packing medium for passion-fruit, consignments latter having reached London in an excellent state of preserva- here are, indeed, great possibilities in the matter of an export trade , not from New South Wales alone, but from all the Australasian , when shippers have learnt how to dry and pack their consign- in such a manner as to ensure soundness and preservation of during the voyage. At present, as the wine-growing interest, it industry has suffered, not so much from lack of foreign appre- and interest, as from the inexperience of those engaged in the

subjoined table shows the productive, non-bearing, and total area ultivation to dessert, table, and preserving fruits, exclusive of oranges, and lemons, together with the total value of the season's , the average value of the yield per acre, and the number of tors engaged, arranged according to the geographical divisions ich the colony has been divided for purposes of comparison :—

Division of the Colony.	Productive Area.	Area not yet bearing.	Total area.	Total value of production.	Average value per acre.
st—	acres.	acres.	acres.	£	£ s. d.
ern District	594	215	809	4,024	6 15 0
er and Hawkesbury Valleys	3,207	1,093	4,300	22,596	7 1 0
y of Cumberland and tropolis	11,238	2,726	13,964	79,350	7 1 0
ern District	1,706	847	2,553	9,827	5 15 0
otal	16,745	4,881	21,626	115,797	6 18 0
le-land—					
ern District	1,361	248	1,609	7,196	5 6 0
al ,,	2,271	689	2,960	11,808	5 4 0
ern ,,	2,733	921	3,654	13,583	4 19 0
otal	6,365	1,858	8,223	32,587	5 4 0
astern Slope—					
hern District	191	60	251	1,917	10 1 0
al ,,	83	36	119	1,072	12 18 0
ern District and Valley of Murray	508	142	650	2,939	5 16 0
Total	782	238	1,020	5,928	7 12 0
estern Plains	73	77	150	1,222	16 15 0
Grand Total	23,965	7,054	31,019	155,534	6 10 0

Of the total area under fruit orchards in New South Wales, two-thirds are situated in the coastal belt, and nearly one-half is metropolitan county of Cumberland. While, however, the acreag total value of production diminish progressively with each divisi the colony westward from the coastal belt, the average yield per is highest in the western plains and on the western slope. The area under fruit of all kinds in New South Wales is 53,045 acres. this extent of land, 31,019 acres are under orchard fruits, 13,943 are under citrus fruits, and 8,083 acres are under grape vines.

FLORICULTURE.

Statistics regarding this branch of agriculture have not yet collected, although there are numerous nurseries, besides private gar in the metropolitan county, in which flowers, plants, and ornam trees and shrubs are cultivated purely in the interests of comm The climate of Sydney is warm and humid, and splendid varieti hydrangeas, orchids, azaleas, pelargoniums, bouvardias, gladioli, c anthemums, dahlias, gloxinias, rhododendrons, and many other sp of decorative flora, are cultivated with success. The coastal bush l and the valleys of the Hawkesbury and its different reaches, explored for variegated, tree, and stag-horn ferns, and their sale f an active part of the metropolitan horticulturist's business. denizens of the forests and ridges as the tiger-lily, the waratah, stenocarpus, the flannel-flower, the Star of Bethlehem, the Christ bush, the wattle-blossom, and the Christmas-bell are gathered by itine flower-vendors and hawked at the corners of streets, besides b procurable in the nurseries and shops of florists.

Recently flowers have attracted attention as the basis of an indu similar to that carried on in the Channel Islands and in different p of France and Germany, viz., flower-cultivation for the manufactu scent – an industry, however, like others mentioned in this chap which awaits development in a more or less distant future. extraction of perfumes, however, received attention in New S Wales as early as the year 1862, when excellent samples were made sold in Sydney; and that the floral products of the colony have been deemed suitable for this purpose is shown by the fact th 1870 Dr. Piesse, of the celebrated French firm, offered premi which were placed at the disposal of the London Society of Arts seven years, for the production of otto of bergamot, otto of roses, of enflowered butter or fat, from certain of the British possess Australia being one of the countries mentioned. There was, how no response from these colonies to this offer. About twelve years Dr. Piesse paid a visit to Sydney, and, with the view of obtaini supply of material for the business of his firm, spent some time i attempt, both on the platform and in the press, to start the indu travelled in Victoria, and on his return home kept the live by occasional letters to the newspapers. In all probability, lishment of the perfumery farm at Dunolly, in Victoria, still concern, was partly the result of his mission. This farm extends acres, and was taken up by a resident of the district who is a f France. Dr. Piesse has asserted that not only could New ales grow all the kinds of flowers produced in Europe, but also perfumes, new, distinct, and exquisite. The matter was taken e Department of Agriculture some time ago, and experiments ducted at the Hawkesbury College. Very satisfactory results tained, but owing to work of a more pressing nature the operare discontinued. The principal plants capable of treatment are, Wild Thyme, Tansy, Wild Mint, Peppermint, Lavender, Verosemary, Mignonette, Geranium, Cassia, Pennyroyal, Violet, , the Bergamot and other Orange trees, and many others. i oil," according to Dr. Piesse one of the most delicious and ils, is obtained from the blossom of the sweet orange, so generally ed in this country. There is every reason to hope that in due e perfume industry will be developed in New South Wales. importations of perfumes and perfumed waters into the colony the year 1897 were valued at about £15,000.

matter for deep regret that the colony's beautiful native flora is radually destroyed. It now contributes, in forming the staple of displays, to the reduction of the debts on churches and other ions ; and the coast-slopes and the bush-lands in the neighbourevery town are periodically denuded to furnish attractions to wer-shows and charity bazaars, the well-meaning decorators of not content with merely plucking the blooms they require for ral designs, tear them out by the roots, and create a waste where as formerly a garden.

VEGETABLE OILS AND ESSENCES.

es the preparation of eucalyptus oil and essence, dealt with in pter on forestry, and the probabilities of the establishment of stry of flower-culture for the making of scents, referred to in the g section of this chapter, there are a number of as yet undebranches of manufacture of vegetable oils and essences, capable st indefinite prosecution. Chief of these are the culture of the e castor-oil plant, and linseed. Oil of lemons and essence of have already been touched upon in that part of this chapter reats of citrus fruits, and, therefore, require no further reference.

has been attempted in New South Wales in the culture of the hich not only yields a particularly valuable oil, but the fruit of as a pickle, constitutes a highly profitable article of commerce.

In the future, however, its cultivation will be stimulated by a g
local demand. In South Australia, where the olive is rapidly beco
staple, and where considerable areas have been placed under th
10s. a gallon for the oil has been received by the growers. The s
climate of New South Wales, in districts where the range of te
ture is similar to that of the olive-growing countries which bord
Mediterranean, should be no less favourable to the culture of th
than the soil and climate of South Australia; in fact, they are c
by some enthusiasts to be even, in certain respects, superior t
latter. In regard to what has been attempted locally, by w
encouraging this industry, it may be mentioned that the Agric
Department of the colony has had planted, at the Murrum
Experimental Farm, 3 acres of olive slips, as a nursery whence
trees may be supplied to persons in the colony desirous of essayi
culture of the olive. There are also a number of acres at the Pera
and a few acres at the Native Dog Bore. Occasionally an appli
for olive trees is received by the Department of Agriculture, bu
are available yet for distribution, and applicants are in the mea
referred to South Australia.

The castor-oil plant (*Ricinus communis*, or *Palma Christi*)
luxuriantly in the humid coastal districts of the colony; as it
indeed, in most tropical and sub-tropical countries, and in the r
bordering the Mediterranean, viz., Greece, Italy, and Spain. Th
sumption of castor oil in Australasia for 1897 was over 640,000 g
of which 159,000 gallons represented the requirements of New
Wales. Nearly the whole of the supply is derived from India: a
average wholesale price of the oil in Sydney is about 2s. 6d. per g
The initial cost of establishing the industry would be heaviest i
item of machinery for expressing the oil, although the price of l
would also have to be considered carefully, as the Calcutta oil i
duced at a minimum outlay in this particular. Oil can be sep
from the seeds of the *Palma Christi* also by boiling in water, but t
the largest quantity can thus be procured, the resultant product
to become rancid, a disability to which the expressed oil is not l
hence expression of the seeds is now the process most commonl
lowed in manufacturing the oil.

One of the most valuable of crops is the flax (*Linum usitatissi*
and it is matter of surprise that more persistent efforts have not
made to acclimatise it in New South Wales. The plant not only
"lint" of two kinds—namely, the long fibre called "flax" and the
fibre called "tow"—but a valuable seed also, of the greatest us
fodder for cattle, in the form of oilcake, of which it forms the
ingredient; for medicinal purposes; and, above all, for the manuf
of the raw and boiled oils of commerce, known as linseed oil, which
the bases of all paint-mediums. The value of this plant can hard
exaggerated. There is always a good demand for flax fibre, whet
be long line or coarse tow, and a lint crop is always disposable.

ul flax-fibre brings at the present time about £17 per ton in the y market; and raw linseed oil, from 1s. 10d. to 2s. per gallon. lant will grow and return satisfactory results in any district where will grow or has been grown successfully, and it is an admirable on crop. It is most favourably cultivated in dry lands, in districts free from frosts, which retard its progress and stunt its growth. untry where water is scarce, fibre may be obtained from the flax- suitable for cordage, and lint or tow adapted to the manufacture rriage cushions, by a process known as "dry-rotting," in which the and the sunshine are utilised to disintegrate the stalks. In the ring table is given a list of the net imports in 1897 of various com- ties which might easily be supplied, with perhaps one or two excep- by locally-grown flax and hemp crops:—

Commodity.	Value.
	£
Linseed oil	33,036
Linseed	2,521
Canvas	55,811
Cordage and rope	46,751
Phormium tenax	6,214
Other flax and hemp	12,022
Fibre	4,985
Total.......£	161,340

'ith the increase of population, and the development of the dairy- ing and shipping interests, the demand for linseed and the various ucts of the flax-plant is bound to grow. The industry has made great ress in India, the Argentine Republic, and the United States. The rt of linseed into the United Kingdom during 1897 amounted to 8,618 quarters, valued at £2,988,503; and of linseed cake, 217,998 valued at £1,280,384. Hemp (*Cannabis sativa*) could also, doubt- be successfully acclimatised in New South Wales. It is supposed e a native of India, but it has long since been naturalised and nsively cultivated in Italy, Russia, Poland, and America. With so a range of habitat the difficulties of its introduction to this colony ot be laid to the charge either of soil or of climate.

nother article of import which might, perhaps, be locally produced at of cotton-seed oil, of which in 1897 the colony imported 32,574 ns, valued at £3,146; but though the quantity looks small, it must emembered that extensive domestic production would mean an ased application of the product.

digo (*Indigofera tinctoria*) is a plant the future of the cultivation hich in New South Wales is looked forward to with some expecta- by those who have studied its possibilities in its new habitat. There the colony a wild plant (*Indigofera australis*), from which it was

hoped tinctorial juice might be obtained; but experiments have b
proved unsuccessful. The true plant which supplies the in
commerce occurs wild in the colony of Queensland, and there
reason why it should not be acclimatised in New South Wales: i
experiments are now being conducted with a view of establishin
a regularly cultivated crop. Indigo yields the drug from whi
beautiful dye bearing its name is obtained, by maceration in wat

Hops.

Hops are but little cultivated in New South Wales, although
very small crops are picked in the neighbourhood of Orange. I
toria, Tasmania, and New Zealand, however, they are successfully
the product being but little inferior to the celebrated Kentish h
England. In the opinion of experts they could also be succe
grown in New South Wales, which imported during 1897 no les
1,059,536 lb. of hops, valued at £37,403. The plant will gro
temperate climate, free from hot winds in the summer; although
in winter are beneficial, particularly in nipping the growth of
shoots, and thus forcing the vitality of the plant into the bines an
during their proper season. Plantations of hops should be cult
in the close neighbourhood of townships and villages, in order to
the labour of women and children in tying up bines, and branchin
picking the hops when ripe. The districts specially adapted f
cultivation of the hop-plant are Armidale, Orange, Goulburn
Cooma.

Failure of Crops.

During the agricultural year ended March, 1898, there were
cases of total or partial failure of crops, affecting an area of 2
acres. Of these, 8,278 were due to drought, more particularly af
the wheat crops on the southern and central table-lands. The
area affected by drought was 250,795 acres, of which the area
with wheat for grain comprised 153,314 acres, and for hay, 44.070
The next largest area affected by any single cause was 2,268 ac
bush fires, 2,201 acres of which were under wheat crops. Flood
excessive rains affected an area of 4,251 acres, and hailstorms
acres; in all three cases the crops affected were chiefly maize. Then
814 cases of failure, over an area of 16,851 acres, of which the cause
not specified, but they affected chiefly the grain and hay and fruit
in the southern and central districts. The ravages of rabbits and
were the cause of 82 cases of failure of crops, covering an a
1,009 acres, nearly all of which were situated in the wheat-lands
colony. The number of cases of rust reported for the last sea
small, only 16 instances of loss, affecting an area of 73 acres,
recorded. In 34 cases the failure of crops, cultivated over 164 acre
caused by vermin. For the last three seasons the acreage

ich have resulted in failure, together with the number of of failure from each cause, are given below :—

f Failure.	Number of Failures.			Acreage affected.		
	1895–6.	1896–7.	1897–8.	1895–6.	1896–7.	1897–8.
....	12,779	4,085	8,278	228,154	110,346	250,795
.. ..	825	31	152	8,898	126	2,100
rains	46	32	173	696	347	2,151
nd hares ...	80	135	126	1,458	4,441	1,717
. ...	29	22	114	690	216	737
ns	130	202	17	1,895	1,338	2,268
....	81	229	16	620	5,753	73
s	14	.....	29	264	......	234
... .	27	36	82	118	215	1,009
. ...	472	356	113	3,563	2,449	701
....	8	2	34	243	6	164
ot specified.	199	271	814	1,697	2,423	16,851
tal...........	14,690	5,401	9,948	248,296	127,660	278,800

erence to the figures just given shows that rabbits and hares the last two years nearly equalled, in the area ascribed to their ions, the ravages occasioned by rust, hailstorms, frosts, and bush- together ; and it must be remembered that the figures given do esent all the injury to crops wrought by these vermin, for a con- e percentage of the losses in the colony's wheat-lands from inspecified, particularly in the southern districts, may justly be heir charge.

r will be found a statement showing the area under each crop d during the last three years :—

n of Crop.	1895–6.	1896–7	1897–8.
e—	acres.	acres.	acres.
....	111,754	68,806	167,813
....	28,100	6,783	20,011
....	4,065	791	2,333
....	117	79	14
....	1,805	500	616
....	130	48	165
....	123	12	326
l	146,094	77,088	191,278
—			
....	54,586	35,022	45,855
....	32,427	7,681	30,714
....	2,602	1,811	3,173
... .	548	210	404
l	90,161	44,724	80,146
—			
....	1,921	582	1,434
....	78	22	71
. ...	29	21	20
wurzel	10	5	2
l	2,038	630	1,527

Description of Crop.	1895–6.	1896–7.	1897–8.
Sugar and Tobacco Crops—	acres.	acres.	acres.
Sugar	3,400	1,771	793
Tobacco	141	8	282
Total	3,541	1,779	1,075
Fruit Crops—			
Grapes	532	683	428
Oranges	552	221	572
Other fruits	3,615	1,904	2,816
Total	4,699	2,808	3,816
Kitchen Garden, Produce, &c.—			
Pumpkins and melons..........	487	196	188
Produce of market gardens	1,103	402	553
Peas and beans ..	136	25	44
Total	1,726	623	785
All other Crops ..	37	8	173
Grand Total..	248,296	127,660	278,800

SERICULTURE.

The attempt to cultivate silk in New South Wales dates f early days of the colony, and has been carried on intermitter since—by many persons, however, more as a hobby than for the of trade. Its cultivation, amongst other things, was contemp the Australian Agricultural Company, as is evidenced by their prospectus, issued in 1825. Sir Thomas Mitchell, in 1831, speak magnificent mulberry trees of thirty-five years' growth in the g Mr. John Macarthur, at Parramatta. In 1845 the rearing of sil was tried on a small scale with complete success; and in 184 cultural farm was established at Eastwood, near Ryde, but capital, and want of knowledge of the proper species of plant, failure to this project. As early as 1862 the industry was com in the Richmond River district, but attention was mainly to the production of eggs, or "graine." Another important att sericulture in New South Wales was made on a private e Corowa, but it was found that the dust which came in quantit a wide highway adjacent caused such deterioration to the tre render the leaf unfit for food. From 1875 to 1883 experim a large scale were carried on at Lavington, near Albury, but he the enterprise was unfortunate: the whole of the worms were off by the disease known as "pebrine," and in 1883 operatio discontinued. In this case diseased graine was said to ha imported, although at the time there was in the colony an e supply which could not be surpassed elsewhere. It is also assert the trees were not of the variety best suited for feeding worms.

Notwithstanding the fact that, after repeated attempts, the es ment of the silk industry in the colony on a profitable basis has been accomplished, the hope of ultimately making it of impor still strong; and when it is remembered that the history of ture in almost every country has been similar to the experience South Wales, this hope is not unreasonable. Introduced into in the 13th century, it made little progress until the year 152 though in Italy Florence early became a centre of the silk t was only after the cultivation of the mulberry by the pe had been made compulsory. It is not, however, to be inferr the difficulties are as great now as then. The reason why silk- has not become a commercial enterprise is principally the fact far there has been no pressing necessity for the occupation. On appears certain, that none of the failures can be attributed to of labour. It is asserted on excellent authority that the re silkworms can be done at less cost in Australia than in Ital settlers in New Italy found to their great surprise that the tin hatching to spinning occupies about eight days less here than i and that the worms require less food; also that the yield of heavier, a two-year old tree in New South Wales giving 12 lb.

Italy only 3 lb. In Italy the production of 1 lb. of cocoon
25 lb. of leaf, whereas 20 lb. is sufficient here. It is in the
stern coastal districts that sericulture has been most successful,
nt developments point to that settlement as one from which
great expectations. The most profitable kind of silkworms
known as "annuals," which produce the cocoon only once,
moths, lay eggs, and die. There are others known as "bi-
and "tri-voltines," which, as their designation indicates,
two or three crops; but the silk is inferior, and the yield less.
ne Tweed River the mulberry tree yields very abundantly, fur-
daily supplies of the leaf from the end of July until the following
It is in the extension of the plantation of white mulberry trees
real growth of the sericultural industry must be looked for.
the soil and climate are known to be favourable, there is no
why farmers engaged in other cultivation should not make this
iliary crop, by means of which, with proper knowledge, the
of their families could derive a fair income. From 2 to 5 acres
sufficient for this on good average soil. As a rule, one person
tend to the crop of 2 acres. The trees should be planted about
acre in really good soil, inferior land requiring from 100 to 150
ne an equivalent result. To estimate the yield of leaf with any
f accuracy is very difficult--it varies so much according to the
plant, the knowledge brought to bear by the grower, and the
n given to cultivation; but taking a medium soil, with 120
the acre, it may reasonably be expected that a tree two years
give 12 lb. of leaf for each rearing, or 1,440 lb. to the acre.
ing 20 lb. of leaf to produce 1 lb. of cocoon, and the value of
oons at 1s. per lb., this would mean £3 12s. per acre for one
—less than two months' work. The maximum yield of the tree
t 36 lb., which it would attain in five years. Although, in a
maturity, 100 trees to the acre is sufficient on good land, some
put in double the number, in order to get a larger supply of
ile the plantation is young, reducing the number by thinning
ut as the trees get larger.

more extensive scale, the question of labour would be different,
penses greater, than when the industry is carried on by a
as a subsidiary crop; but, on the other hand, exclusive attention
be productive of higher results, and it may be pointed out that
not the fear of disappointment from climatic causes, or from
tion in values, which attends the cultivation of other crops. In
ne co-operative system, by which a grower of leaf and a rearer of
share results on terms mutually agreed upon, is common; in
ases the leaf grower also supplies the eggs, or the worms just
g ready for rearing by the second party. A breeder of experience
South Wales advises the rearing for graine and rearing for silk
eparately carried on by different persons. Probably the attempt
bine the two operations has contributed to the failure in this

colony. For each rearing or "family" the average quantity of is 2 oz., which contain about 80,000 eggs. With due ca loss will not be much over 5 per cent., and assuming that cocoons are obtained, and that a little less than 400 cocoons go lb., the total yield of cocoon silk from each rearing is nearly 200

In 1890 steps were taken by the Government to assist the settl New Italy in the development of sericulture. Loans of mon 5 per cent. interest, were made to the settlers to the amount of trees and cuttings were distributed; an area was cleared and pre for a plantation and nursery at which a silk-rearing house was erected, and an officer was appointed to conduct all operations and actions; but the proceedings were subsequently abandoned. Lat a silk station was established at Booral, near Newcastle: but th now passed into private hands. The rearings of silkworms at this have, until the present season, been considerable, and the coco raw silk have proved of excellent quality. Samples of the pr were forwarded to Sir Thomas Wardle, President of the Silk Assoc who reported that the cocoons seemed excellent, and the ra practically perfect, adding that if this silk could be produced quantity there would no doubt be a very good sale for it.

The total value of cocoons reared in France and Italy annually i £10,000,000 to £13,000,000, and the value of raw and other factured silk imported into the United Kingdom during 189 £1,880,000.

COFFEE.

In the north-eastern and semi-tropical portions of the colo coffee-plant has been proved to thrive in perfection; and although its growth has not been made a commercial venture, for many ye product has been privately used by growers in the Clarence and mond districts. Some twelve years ago, in a report on these di attention was called to the remarkable yield of coffee trees whi been planted here and there by some of the settlers; and re interest in the matter has been revived, an experienced coffee p who had been for some time in Ceylon, being authorised by the M for Agriculture in 1898 to visit the districts referred to and repor their suitability for coffee-growing as a commercial enterprise. feared that the frosts occasionally experienced even so far north be detrimental to the success of the industry; but this fear wa pated, and the report to the department, on the Richmond, Claren Tweed districts, stated that the soil and climate were all that co desired, as were also the specimens of coffee trees which were to there, these being strong, healthy, and well-grown, and in instances laden with crops. It was surprising, the report stat the industry had not progressed beyond the experimental stage.

Although the plant has been grown in a haphazard manner, persons not sufficiently acquainted with the proper methods of culti

sults obtained have been remarkable. From three fine trees
arm at Belambil, about 13 miles from Murwillumbah, the yield
ason--weighed by the expert making the report-- was 18 lb., or,
ag 1 lb. for parchment skin, 17 lb. of clean coffee--over 5 lb.
ee. On another farm the trees bear at the rate of 4 to 7 lb. per
5 lb. per tree would give about 53 cwt. per acre, or at £4 per
e London --coffee to the value of more than £200. On the coffee
tions in Ceylon, 1 lb. per tree --1,200 trees to the acre --or just
10 cwt. per acre, is considered a heavy crop. From a private
at Grafton, where, contrary to the practice on plantations, the
have been allowed to grow to their full height—12 to 14 feet—
ousehold, as well as many of the friends of the grower, has been
ed with coffee for years. The trees in the districts visited by the
t have been growing for years, and there are no signs of leaf-
e or any kind of blight. As there is evidence that there will be
iderable demand shortly for coffee plants, a nursery has been pre-
at the Wollongbar Experimental Farm, and a small area has also
aid out as a plantation. Similar preparations have been made by
ier at Terranora. Opposite Chatsworth Island a cultivator, who
en getting heavy crops off a few trees for the last eight or ten
has now a plantation of 1,000 trees, which are in their third year
out to bear the first crop.

there are considerable variations in the prices of coffees on the
ean markets, due to the manner in which the different consign-
have been cured, and as in Ceylon considerable experience is
ed of the person in charge of a plantation, it is obvious that the
sful development of this industry will demand great care in its
stage. It has been suggested that the Government should
sh a plantation near Grafton, and another on the Tweed, for
rpose of instructing the growers; but as the impression is gain-
round that there is money in coffee-growing, the industry will
ly fight its way unassisted. Of course the employment of coolie
in Ceylon makes the cost of production very much lower than it
possibly be in New South Wales; but, on the other hand, this
be counterbalanced by the heavier yields. Small plantations of
acres could be worked without machinery, but larger plantations
e pulping machinery, fermenting and washing cisterns, etc. A
alper sufficient for a crop of 25 or 30 acres can be purchased and
own for about £17. The number of plants put in is about 1,200
acre, and for pulping and washing the crop a water supply should
ilable. The net importations of raw coffee into New South Wales
; 1897 amounted to 626,362 lb., valued at £22,760; and prepared
was imported to the value of about £1,000. The use of coffee in
alia is not general; but it may be stated that the total value of
offee imported into the United Kingdom in 1897 was £3,585,944,
one-half of which was retained there for consumption.

little room in the colony for the operation of industrial for
it was long before the authorities would recognise that the
had any rights beyond that to mere subsistence. This was
inevitable in a place where the great majority of the labour
emancipists ; but the same ideas dominated the policy of the
powers long after the free population became an important facto
industrial life of the colony.

Throughout the first industrial period, and, indeed, until
later time, the spirit of the Government was that of patern
ference in every concern of social life. For the individual, es
the labourer, everything was regulated. The Governor fixed t
and determined the quality of the provisions consumed in th
ment ; he made grants of land, and, in order to beautify his met
required those who received grants within its boundaries to bu
stantial and handsome edifices thereon ; he erected markets, and
by-laws for their governance ; he served out lands, cattle, and pr
to his subjects like a tradesman purveying general merchand
adjusted tolls, ferry dues, and wharfage fees, and gave an eye to mu
matters. Moreover, he gathered together the orphans in the
and supported them out of the proceeds of the duties and c
collected at the port. To the labourer he strove to ensure a fixe
wage ; from the labourer he sought to exact an unvarying am
the price of his loaf or his pound of meat. This was not only p
but seemed entirely at one with the ideas of the times, as the e
properly so called, was looked upon as an intruder whose p
though distasteful to the authorities, could not altogether be avo

During the whole of the first period the Government was th
employer of labour : indeed, in the earliest years there was n
Amongst individuals, the military officers were the first to seek
and to them were made over a number of prisoners, by who
large area of country was cleared and cultivated. At first the
ment supplied assigned labourers with clothing and food ; but t
soon altered, and the expense of maintaining them was bo
their employers ; indeed, this relief of the public stores was th
consideration which induced the authorities to introduce the prin
assignment. As years went on, an increasing number of men
sentences had expired became available for ordinary employme
these, with the soldiers who preferred to remain in the colony.
officers, civilians in the employ of the Government, and, last
few free immigrants who had made their way to the sett
formed the industrial population. For a considerable period t
population was not large, and there was no need to make spec
vision in the laws in regard thereto ; but as the free element g
importance, the Governor found it necessary to promulgate l
the regulation of the relations between employers and the free em

The laws affecting labour were all conceived in the spirit of the
curse, which designated work a punishment, the life of man a

d his time here below a probation to be spent in weariness and rrow. The General Orders issued during the first thirty years were fficiently harsh and callous even when their provisions were framed ith especial reference to the bond population, but they were scarcely re tender or considerate when they sought to regulate the conditions verning the operations of free labour. The hours of toil were estab- shed, and on no tender scale. A day's work for stacking and carrying ain was fixed at from 5 o'clock in the morning until 7 o'clock at night, three hours for food and rest. The wages to be paid for various es of labour were also arbitrarily determined. Should a labourer or demand more than the regulated rates, or refuse to work for wages, he was to be set in the stocks for two days and one night the first offence, and for a second or continued refusal he was to dergo a penalty of three months' hard labour. No person was allowed take work unless he could, if a freeman, produce his certificate, or, bondman, his ticket of leave. For the infringement of this regu- tion the penalty inflicted on the employer was a fine of £5, and 2s. 6d each day on which a free labourer was employed, with more than uble this fine in the case of the employment of a bondman; and for ying more than the regulated rates he was liable to be imprisoned ten days, in addition to the fine. The harbouring of a runaway prentice involved a penalty of six months' hard labour to a freeman, d of one hundred lashes, with other punishment, if the offender were prisoner. As the framer of the laws, the Governor had always before m the fact that the employer was often little better than the bourer he employed, both, as a rule, belonging to the emancipist class, d both, therefore, in view of their common origin, deserving of some- hat similar punishment for breaches of the labour regulations, un- fected by the accident of the possession of property by the one, and e want of it by the other.

The lot of the free labourer, even though he generally was an eman- pated convict, was very severe. Long were his hours of labour; and s pay was by no means commensurate with his day's toil. Agricultural bourers were paid £4 for clearing and hoeing for corn an acre of ound; timber-getters, for sawing 100 feet, 7s., and for splitting 100 et, 1s. 6d. to 2s. In 1796 the sum paid for making a pair of boots as 3s. 6d.; for a coat, 6s.; and for a gown, 5s.; carpenters received s., and field labourers, 3s. a day, without rations, and these were con- dered high prices. In 1814 a general order fixed the price for felling rest timber at 10s. per acre, and burning off at 25s. per acre; cutting wn weeds and brush and burning off at 10s. per acre, and a splitter's ily remuneration at 2s. 6d. Three years later the price given for lling forest timber was reduced to 8s. per acre by an official regulation, rning off to £1 per acre, and other work in like proportion.

The annual expense of a convict to the Government was about £36 £40 a year, including rations; and this the masters had to bear n assignment of prison labour. In addition to the men wholly

assigned to masters, there was another class of labour availab
prisoners who were not assigned were employed by the Governm
as their day closed at 3 o'clock, it was permissible for them t
themselves for the remainder of the day to a private employer.
was, therefore, free to work for himself after the hour mentio
all that he could earn "on his own hands" became his personal p
By general order, a prisoner's remuneration after hours was fix
per day ; but it is probable that skilled men, when they chose
found the inducement more profitable than was contemplated.
respects, therefore, the lot of the prisoner was better than th
free labourer, who was compelled to clothe and feed himself.
early days of paucity of labour it was also customary to pe
soldiers to engage themselves during the harvest months, and a
order limited the remuneration to be paid to each man
currency per week, or 1 bushel of wheat per acre harveste
worker's option. A master transgressing this order was puni
fine ; and in the event of any soldier demanding more than t
lation amount, he was summoned before the nearest magis
answer for his conduct.

This regulation of prices by law was strictly in accordance
ideas of the times, the object aimed at being to ensure to settlers
of cheap labour, and incidentally to protect the labourer again
on the part of the master. Its principal effect was to pre
worker from recovering in the Courts a greater price for hi
than was stipulated in the schedule, whereas the moment it be
interest of the employer to give better terms he would do s
rates published by the Governor referred only to the various
labour pertaining to agriculture and the allied pursuits, the
artificers, particularly of such as were most useful in a you
munity, being much higher. Transportation from England and
was maintained during the whole of this period, and reached v
proportions about the year 1817, in response to Macquarie's
for labour to carry on the agriculture of the country and to
the numerous public works inaugurated during his term
Voluntary immigration almost entirely ceased with the inc
transportation : indeed, it was in many ways discouraged, the
Government going so far as to prohibit any person from proce
the colony who could not prove that he was possessed of
property to enable him to establish himself on his arrival there

Wages were paid partly in money and partly in kind. so
studying the condition of industry some consideration must be
the question of rations. These at first comprised an allowanc
beef, maize, and split peas ; but they were subject to com
modification according to the condition of the stores, and e
during times of scarcity. Such measures were, fortunately, n
necessary ; but the occurrence of periods of want, if not of
famine, had to be anticipated in a colony dependent for its

vely on importations, in days when ships visited the settlement long intervals, and prospects of profitable trading had not yet ade manifest. The fact that supplies were not sooner obtained e soil of the country was probably the result of ignorance rather lethargy, for when knowledge was gained the difficulties in of obtaining breadstuffs disappeared.

rnor Macquarie continued the rates of remuneration authorised predecessors; but he directed that masters should pay their d servants a yearly sum of £10 for a man and £7 for a woman, ng the value of slops allowed, or £7 for a man and £5 10s. for a when clothing was supplied. It is probable that these rates were ined by custom, as it is certain that most masters made allowances men at about the scale named; and that the rule was introduced the cases of those who made no allowance or such as was insuffi- meet the wants of their assigned servants. The whole tendency regulations was to allow the average free labourer to earn week in addition to rations, or 20s. a week where rations were pplied. As already remarked, there is abundant contemporary ny that, in spite of the severe penalties of the law, the legal ere not adhered to, for the settlers ordinarily had to give more, ourers refusing employment at the fixed rates.

age prices of some few articles during the first twenty years of ent are given below; and although labourers in receipt of 3s. a uld purchase few of the commodities mentioned at the open they would probably, under the necessity of accepting the barter y of the country, be compelled to take them in payment for their notwithstanding that by special regulation it was ordained that es were to be paid in sterling money or in wheat, at the option abourer.

	s.	d.		s.	d.
ize, per bushel............	10	0	Salt pork, per lb.	0	7
eat, per bushel	12	0	Rice, per lb.	0	3
rr, per lb.	0	9	Potatoes, per lb.	0	3
ter, per lb.	3	0	Moist sugar, per lb.	1	6
ese, per lb.	2	6	Soap, per lb.	1	0
on, per lb.	1	9	Eggs, per dozen	2s. to 3s.	
t beef, per lb.	0	5			

e figures represent the average market rates, but prices were to great fluctuation; for example, wheat sold in 1817 at 25s. hel, while maize touched 16s. in some other years. Fresh meat t plentiful, as the Governors were afraid of destroying the g stock, and Macquarie at one time actually attached the penalty h to the destruction of the wild cattle found at the "Cowpas- of Camden, although these cattle were afterwards killed, as feared that they might deteriorate the breed of stock. The were at all times encouraged to keep pigs; and they must own vegetables, as American whalers, even in the earliest times, ustomed to put into Port Jackson for a supply.

Trade and communication were restricted, not only with the
ensuring the safe keeping of the convicts, but also in the con
interests of Great Britain, and particularly of the East India C
British seamen were forbidden to go on board a foreign vess
the penalty of a £50 fine, and no British subject was permitted
into any contract with the subjects of a foreign power under
being sent away from the colony. Ships bringing cargoes f
part of the world, unless the goods had been manufactured i
Britain, were obliged to pay a duty of 5 per cent. *ad valorem*
amount of their invoices, and special enactments were from
time levelled at the importation of merchandise "brought f
eastward of the Cape of Good Hope." The isolated condition
settlement rendered colonists peculiarly liable to extortion on
of traders, and the paternal Government therefore issued a
order forbidding traders to charge for retailing more than 20 p
advance on the importers' prices. In doubtful cases the reta
was required, if sued for, to be estimated by the Courts, at an
of from 80 to 100 per cent. on the prime cost of English or
goods, or of 20 per cent. on the retail price in the exporting cou

Notes of hand for contracted debts were not recognisable as e
unless the account of the articles sold, with the prices stated
was also produced. No note of hand could be drawn in cop
or in Colonial currency, as such bills were, under an order
Governor, to be liquidated in sterling money only, and the
"sterling money" had to be expressed in the body of the note
The penalty for a breach of this regulation was a fine of £
subsequent regulation prohibited any person from receiving or
any note of hand that had not the words "sterling money"
expressed, under a penalty of double the amount of the note i
on both payer and receiver. Having regulated the relations of e
and employed, of buyer and seller, and the prices of labour an
sions, it was only fitting that the rate of interest should be dete
The Governor, therefore, prohibited the charging or acceptance
than 8 per cent. interest on any bill, bond, or the like, under a
subject to the laws against usury. It is almost needless to s
this regulation was set at nought by the usurers without difficul

Prior to the year 1810 industries properly so called were non-e
but Macquarie's term of office was marked by considerable com
activity. Vessels were built and fitted out in the dockyards of
and public works were pushed on by the Governor with charac
energy. In the year named the settlement possessed a brew
pottery, a tannery, a manufactory for tobacco pipes, and anot
coarse cloths and woollens. The last named was established at
matta in order to utilise the services of the women prisoners, w
also employed in spinning linen out of the white flax of the c
Among articles of export to the East during these early ye
sandalwood, for which there was an excellent market in Chin

in a certain sense contraband, as it involved a breach of the
f the East India Company. Despite the fact that the port of
e was a dangerous place for vessels to enter, the exportation
vas attempted, and there appears to have been some trade
n with Bengal in this mineral. Among other exports were
mer, whale oil, whale bone, seal skins, kangaroo skins, and
hat was destined to be the staple product of the colony—wool.
beginning of Macquarie's administration, he was recommended
as many reforms as possible in the restrictions imposed upon
e by his predecessors. Many of these restrictions were of a
y harassing and impolitic nature, and were calculated to greatly
ge mercantile speculation. The most grievous was that prac-
tioned by long usage, by which the Governor fixed the maximum
be paid for all imported merchandise—prices often too low to
fair profit to the trader. The entire cargo of a vessel was
by the officers of the settlement, who alone had liberty to
e, and articles of the first necessity were subsequently retailed
to the settlers at greatly enhanced prices. Another regulation
ticularly oppressive character was the prohibition of any trading
rom calling at the settlements at Van Diemen's Land for the
of disposing of goods, unless it had previously touched at Port
. These and other abuses were in some cases restricted in their
n by Macquarie, and in others abolished. Soon after his arrival
way with the practice of fixing a maximum price for grain and
s meat, but reverted to it a few years later.

eople, other than those of the labouring class, were, according to all
porary history, in a flourishing condition, but this description must
ken too literally, as it was that of men accustomed to the wretched-
English or Irish peasant life, and what would be deemed fairly com-
by them would nowadays be looked upon as far from tolerable.
rds the ordinary labourer, his material condition was in every
wretched. He lived usually in a windowless hut, was clothed with
and his food, though plentiful, was coarse and savourless. Of op-
ties for amusement, culture, or self-education, he had none. Books
rdly to be obtained; morality was at its lowest ebb; and religion was
r of authoritative regulation and enforced ceremonial obedience.
method of exchange prior to Macquarie's arrival was mainly
varied to a slight extent by the circulation of foreign silver and
er coin. The latter possessed twice its English value, and a
order was promulgated against both its import and its export.
the history of the colony, various expedients were resorted to
smen, and shopkeepers' notes were circulated for sums varying
upwards, payable in Spanish dollars. The standard currency
onsisted of paymaster's notes on the English Treasury, and
re negotiable with shippers in exchange for goods, a fact which
materially in the establishment of a trade monopoly by the
f the civil and military departments.

The local values of the coins circulating in the settlement
the arrival of Governor Macquarie were as follow :—

	£	s.	d.		£
Guinea	1	2	0	Spanish dollar	0
Johanna	4	0	0	Rupee	0
Half-joe	2	0	0	Dutch guilder	0
Ducat	0	9	6	English shilling	0
Gold mohur	1	17	6	A copper coin of 1 oz.	0
Pagoda	0	8	0		

These currency values were, however, subject to considerabl
ation, and there was, moreover, a great diversity in the nomina
set upon the Spanish dollar at one and the same period. La
rarely saw this coin: they were paid for their work in g
monopoly values, and their remuneration consisted chiefly of r
price of which was determined by the importers, who saved the
from competition by a mutual agreement as to prices, entered
1797, by which they were bound neither to underbuy nor under
another. The goods purchased by the officers from speculative s
were paid for in wheat receipts, in paymaster's notes, and in
dollars. It was to prevent the depletion of silver curren
Governor Macquarie in 1813 adopted the expedient of strik
centre out of the dollar, and using the "dump" to denominate
of the value of the original coin, which, however, still passed cu
a convenient denomination of the value of 5s. Private soldi
for many years were paid in pence, were unable to trade w
shippers, as copper coin was token money, which, if its export h
allowed—as it was not—would have had an actual value of
current rating. The disability of the private soldier to buy in t
market was, however, altered on Governor Bligh's arrival, for h
their pay in paymaster's bills similar to those received by the of

The currency continued very much in the unsatisfactory c
described until the growing business of the country allowed of
ing of a bank. The proposal to establish a local bank had been
aside in 1812 by Lord Liverpool, who informed the Governor t
to the value of £10,000 would be sent from India, in order to
colony over its currency difficulties. This remittance, howe
from satisfied the wants of the community, and the Bank of Ne
Wales was opened for business on the 8th April, 1817. Its
amounted to [illegible] into 200 shares. The bank wa
porated under a regular charter, and its affairs were contr
a president and six directors. Its paper soon became the p
circulating medium of the colony, and business was done
discounting of bills of short date, and in the advance of money o
gage securities. Government payments for provisions purchase
continued to be made with receipts from the Commissary, whic
taken into the Bank, were exchangeable for bills on the King's T
Captains of vessels purchasing provisions in the colony drew

owners : while the commercial transactions of the inhabitants
ducted in currency dollars, copper, tradesmen's dockets, and
s of the Bank of New South Wales. It is a peculiar fact,
eristic of the period, that a debt of more than £300 was regarded
f honour, in consequence of the abuse of the privilege of appeal
e local courts to the King in Council.

n Major-General Lachlan Macquarie entered upon the govern-
f the colony on the 1st January, 1810, the population numbered
persons. The settlement was bounded on the north, west,
uth by the Blue Mountains, beyond which no one had then been
penetrate, though several attempts to do so had been made, and
the general opinion that farther than 60 miles away no land
le for tillage was likely to be found. Along the sea the colony
ded from Port Stephens to Jervis Bay, a distance of about 165
and it was confidently stated that beyond these inlets settlement
not expand, the ground actually in cultivation amounting to
more than 21,000 acres, together with 74,000 acres devoted to
re. Macquarie's term of office was, however, brightened by the
ssful passage of Blaxland, Lawson, and Wentworth to the plains
d the mountains, and the subsequent discoveries of new areas for
ment, which finally dissipated the idea, long entertained, that the
y would cease to exist should the support it received from the
h Treasury be withdrawn.

SECOND INDUSTRIAL PERIOD, 1821-1838.

e second period of the industrial history of the colony begins with
ssumption of office by Major-General Sir Thomas Brisbane at the
lose of the year 1821, and includes the administration of Lieutenant-
ral Darling from the close of the year 1825 to that of 1831, and
r Richard Bourke from the close of the year 1831 to that of 1837.
area of the settlement was, during the whole of the period, con-
ily being widened. In 1823 Allan Cunningham found a practi-
route through Pandora's Pass to the rich Liverpool Plains.
ng the following year Lieutenant Miller formed at Moreton Bay
tablishment which afterwards became the capital of Queensland.
first great journey of exploration by Major Mitchell to the north
orth-west of New South Wales was entered upon in 1831. The
ey proved rich in results, and added greatly to the knowledge of
olony's resources. The unlocking of territory had an emphatic
nce on the development of the country's industries, as settlement
wed close on the heels of the explorers, and tended to provoke
est in the minds of English speculators, a great deal of whose
al began to seek investment in station properties.

e labour legislation of this period did not depart to any appreciable
nt from earlier ideas. Under the provisions of a regulation issued
he 17th July, 1828, servants neglecting or refusing to work, or

absenting themselves from their employment, could be sent by
trate to the common gaol or the house of correction for a t
exceeding six or three months respectively, with forfeiture of al
due ; and servants spoiling, destroying, or losing property were
to pay double the value of the article injured or lost under a
of being committed to gaol for a term of from one to six month
the other hand, a servant had remedy against an employer's ill-
to the extent of six months' wages and cancellation of the agree
service. Any person who employed a servant previously retai
liable to a fine of from £5 to £20, half of which was paid to the
aggrieved and half to the Benevolent Society. Subsequent labo
lation was even more repressive in its character, as will be seen l

The comparative scarcity of free labour and the high pric
it commanded show forcibly the unprofitable nature of bond
which, though available for little above the cost of rations,
some considerable time a drug in the market. This was especi
case during the period of extensive immigration which occurre
the administration of Sir Thomas Brisbane. The Government
fore, was hard set to provide suitable employment for the prison
on its hands, the number of whom was constantly being augme
the arrival of transports from the United Kingdom. To ena
Government to dispose of this labour, it was decreed that any fre
having an order from the English authorities for a grant of lan
by pledging himself to employ twenty bond servants, obtain a
2,000 acres. There were, indeed, instances of settlers obtaini
quantity of land even without such an order, simply upon guara
to relieve the Government of the expense of maintaining twent
and in 1826 the weekly sum of 3s. 6d., which had been
December, 1821, payable to the Government as hire for an a
artisan, was abolished. Assignment, it will be seen, was
a device adopted by the Government for the maintenance
bond population with as little outlay as possible, and land wa
away, not so much with the view of encouraging settlement
inducing holders to relieve the authorities of the cost of main
prisoners, for whom no profitable employment could be provided
Government. The continual immigration of free settlers, most o
obtained grants of land, with the right of receiving an assignm
men proportionate to their grant, rapidly used up the supply of
able persons: the government farms, which had been establis
the purpose of keeping the convicts at work, were abandoned,
penal settlements were broken up and their occupants dist
among those who wanted labour, until in Governor Darling's t
opposite condition was reached, and it was found impossible to
the demand for assigned servants. The first result of the ex
system of assignment of labourers to private employers was tha
able-bodied man of orderly conduct was in specific employment,
colony was left without any reserve of labour which could be

emergency, so that in harvest and shearing times there was r a great scarcity of men. It was this need of hands on ccasions that gave rise to the scheme of assisted immigration, n to take effect in 1832.

ile of the social, economic, and political literature of this constantly insisting upon the growing disproportion between etary class in the colony, particularly capitalists who had pastoral pursuits, and the labouring class, whose assistance tely necessary in the effort to realise returns; and inducevery description were held out to the agricultural peasantry ted Kingdom to emigrate to the southern promised land. s of the immigration committees are particulary interesting, the schemes, more or less impracticable, advanced by philanmphleteers for the colonisation of the country. The desire cheap labour was not the only influence at work in the proimmigration; there was also an earnest wish on the part of cure population of desirable types in order to develop the f the country, and on the part of others to afford relief to sed peasantry of the United Kingdom. Judging by a report of ee of immigrant mechanics, blacksmiths, carpenters, caulkers, onemasons, stonecutters, and shoemakers easily found employile for all kinds of field-labourers, bush hands, dairy hands, and shearers, the demand was very strong.

roduction of a system of assisted immigration marked a vast the ideas of the governing powers since the departure of Macquarie. Under his regime, not only was no encouragered to intending emigrants from England, but they were discouraged. This change of policy was due to the expandthat the opening up of new territory had on men's minds. the colony was shut in by the barrier of the Blue Mountains as it possible to keep it mainly a penal settlement; but with ery of the western plains all hope of doing this completely As the expense of a passage from England or Ireland renifficult for mechanics to make their way to the colony, the f paying a bounty for immigrants of a certain class was l. However, the number of mechanics brought out does o have been large. The bounty was probably of most adpersons already in the colony who desired to bring out their k and children. There was, however, as already mentioned, ux of non-bounty immigrants; but it is not likely that these many mechanics or labourers. They were principally enteren of small means, and professional men anxious to practise ny, or failing that, to turn their hand to trade or squatting.

oderich, Secretary of State for the Colonies, being impressed time, 1831, with the great disproportion existing between and desirous of remedying this state of things by the introa number of unmarried female immigrants, recommended the setting aside of a portion of the revenue arising from of Crown lands as a fund from which advances might be n way of loan, to assist in paying the expenses of the pa desirable persons. From this time forward it became custo regard the revenue derived from the sale of Crown lands as not a part of the income of the colony, but a reserve availab purpose of meeting the annual expense of bringing to the colo grant labour, of which, for long years, it was so sorely in n 1831 it was estimated that the revenue accruing from la during the ensuing year would be £10,000, and the appropri this amount towards the encouragement of the immigratio married females was sanctioned by the British authorities, wi ever, a reservation to the effect that no other appropriation o derived from the sales of land in New South Wales should until the expense of £10,000 should be liquidated. The sun buted to each female immigrant was £8—half the estimated co passage out, the other half being made up by the immigrant In the case of the funds proving deficient, a preference was to be females immigrating in company with their families over such unattached. It was subsequently recommended that a limited of mechanics should also be assisted with advances to enable emigrate; and agricultural labourers were afterwards include those to whom it was considered advisable to advance money b loan as an instalment of the passage-money to the colony. Th however, underwent certain changes from time to time, accordi amount of the land fund, the need for labour, and the ente private settlers. In 1835 bounties were offered towards defr expense of the passage of immigrants, to such settlers as woul themselves with their introduction. These were £30 for a mechanic or farm servant and his wife, the age of neither exceeded 30 years; and £5 for each of their children ove months of age. For an unmarried female between 15 and 30 age the sum of £15 was allowed, and £10 for an unmarried or male farm-servant between 18 and 25 years of age. Sub the system of assisted immigration was developed on other lines principle of introducing rural labourers and their families, singl and skilled artisans was steadily maintained throughout the this period after its first adoption.

Under the regulations by which prisoners were assigned, e were forbidden to give their servants regular wages; but i known that there were employers of assigned labourers who wages, and that printers, for instance, received as much as and even more per week on account of their masters being u impression that night-work could not otherwise be enforced. blacksmiths, and others received 7s. per week, besides food and the printers, however, maintained themselves. The wages pa labour in the first years of Brisbane's administration was, fo hanics, from 5s. to 7s. per day without rations; and for ral labourers in 1828 from £20 to £30 per annum with rations, ome cases even £50. In the towns especially, artisans, such as rs, could at this time earn 50s. per week; but wheelwrights and ths received about 36s. per week, and unskilled labourers from is. per day. Quarrymen appear to have been in special and their labour has been recorded as worth 10s., and even 20s. per day, though the last-mentioned amounts must have en only in special cases. Compositors could obtain from 35s. week; but clerks and professional men had few opportunities n employment. In 1830, when the population had increased to the services of artisans of various classes appear to have been wanted, and for some years afterwards every description of labour risk demand, although the remuneration of skilled mechanics d unaltered. The following statement shows the average wages ring the period, and includes the daily wage given to labourers iving board and lodging. The quotation of daily rates, however, o be misleading, as few mechanics secured, even if they sought loyment during the whole year. It is probable that common rs did not earn more than from 4s. to 5s. per week with rations gings, and mechanics of the highest qualifications did not average an £2 per week the year round. Where no quotations are given and following tables no reliable information is available.

Trade or Calling.	1823.		1833.		1835.		1836.		1838.	
Per day, without board and lodging.										
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
ksmith	6	0	7	0	7	0	6	8	7	0
cklayer	6	0	5	0	6	6	7	3	6	6
ckmaker, per 1,000	6	0	9	0	9	0	5	3	9	0
inet-maker	6	0	6	0	6	0	6	4	6	0
penter	6	0	6	0	6	9	6	4	6	6
iker	7	6	7	6	8	6	6	9	……	
per	6	0	6	0	7	6	6	6	7	6
rier	6	6	6	6	6	6	6	6	6	6
nfounder	6	3	6	3	6	3	6	3	6	3
bourer	3	0	3	0	4	0	4	6	4	6
llwright	6	6	6	6	7	0	7	3	7	3
nter	……		5	0	……		5	4	……	
sterer	5	6	5	6	7	0	6	6	6	3
arryman	……		5	6	5	0	5	6	4	6
emaker	6	0	6	0	6	0	5	10	6	0
nemason	6	0	6	0	6	8	7	6	6	8
lor	……		5	6	6	0	……		6	6
eelwright	5	6	5	6	6	0	6	0	5	6
Per annum, with board and lodging.										
	£	s.	£	s.	£	s.	£	s.	£	s.
ricultural labourer	22	10	22	10	22	10	22	10	25	0
irywoman	10	0	12	0	12	10	12	10	12	10

The wages of a shepherd during this period of the colony' appear to have been from £20 to £30 per annum, and of a sl watchman, £20 per annum. A ploughman's remuneratio months' work was quoted in 1835 at £20. Piecework was as follows:—Picking weeds off fallow ground, 2s. per acre; 8s. per acre; carrying, stacking, and thatching, 10s. per ac threshing grain from the ear, 6d. per bushel. The Select Com the Legislative Council, which sat in 1835, reported, after taki evidence, that good mechanics could earn from 30s. to 40s. per farm labourers from 7s. 6d. to 10s. per week with rations. O witnesses examined by the Committee stated that he paid shi coopers, and blacksmiths from 7s. to 8s., and sailmakers 6 adding, "We consider these wages too high, but find it imprac reduce them, as rather than take less the men will go out of w they can afford to do so, because the wages of three or four suffice to maintain them for a week." Another witness sai millwrights, blacksmiths, and engine-drivers 42s. per week, an good carpenter could earn £3 3s., and a stonemason from £3 week. All the witnesses were agreed as to the difficulty of labourers to move into the country districts—a difficulty th severely against the agricultural and pastoral industries tha another Select Committee was appointed to consider the qu labour and immigration. In contemporary evidence, howe allusions to the difficulty of obtaining good men and to the hi enjoyed by mechanics should be accepted with some cautio population numbering under 98,000 the demand for good m have been limited, while the presence of bond labour and the of finding employment for it may be expected to have interf seriously with the regularity of the work to be obtained by There was probably in the country districts a demand fo labourers in excess of the supply; but a glance at the forego will show that the wages such men could earn did not offer a ment at all commensurate with the discomforts and dange they expected to encounter.

Prior to the year 1827 tea and sugar were almost invariably as part of the rations issued to servants; but owing to the s circumstances of the settlers, the result of unfavourable seaso fall in the price of live stock, the place of these was taken The weekly ration, as fixed by Government, was as follows wheat or 9 lb. seconds flour, or in lieu thereof, at the discreti master, 3½ lb. maize meal and 9 lb. wheat or 7 lb. seconds flo beef or mutton, or 4½ lb. salt pork; 2 oz. salt, and 2 oz. so articles beyond these which the master might supply were t sidered as indulgencies, which he was at liberty to discontin ever he might think proper. In 1828 the crop of the col found insufficient for its needs. Grain had consequently to be i and a scarcity of breadstuffs was apprehended. The Governor, t l a general order in which the rations issued to labourers in ic service were reduced to 7 lb. of bread; and all persons and aving in their employ assigned servants were earnestly recom- to adopt a similar scale, and to make up for the reduction by g the ration of meat.

rices of provisions fluctuated considerably, and especially was case in reference to such as had to be imported. Locally-pro- rovisions of all kinds were, however, generally plentiful at prices, the ruling rates in 1823-24 being as follow:—

	s.	d.		s.	d.		s.	d.
r, per lb.	2	3	to	2	10	Fowls, per pair	3	4
e, per lb.	1	3				Wheat, per bushel	8	0
pork, per lb.	0	6	,,	0	8	Maize, per bushel	6	0
beef, per lb.	0	6	,,	0	8	Barley, per bushel	5	0
on, per lb.	0	6	,,	0	8	Potatoes, per cwt.	8	0
l, per lb.	0	3½				Eggs, per dozen	1	10

is time only one market a week was held in Sydney; and in tta markets were held only twice or thrice a year. The great which began in 1827 sent corn up to a very high figure, and ttlers to dispose of their live stock in order to buy grain for ort of their household and establishments. All provisions, with ption of meat, which became very cheap indeed, rose in price, crisis was accentuated by the collapse of the sheep and cattle ion inaugurated a few years previously, about the time of the n of the Australian Agricultural Company. The price of wheat nth to month ranged from 7s. to 14s. 9d. per bushel; of maize, to 10s. 6d. per bushel; of barley, from 4s. to 9s. 6d. per bushel; from £10 to £17 per ton; and of straw, from 20s. to 35s. per he drought appears to have been almost general, and, in the f a writer of the time, it had "blasted the whole country"; he future prospect of subsistence diet was confined to a ater and an abundant supply of meat, which was being at 1¾d. a lb. Fortunately for the colonists of New South the proximity of Van Diemen's Land, where an excep- good crop had just been gathered in, prevented many of the ects that must have followed in the wake of long-continued prices for grain. Pork was quoted at 8d. per lb., and all vege- vere advanced to twice their ordinary price, while they had ated by half their usual quality. The Sydney market, in er, 1828, supplied the following quotations:—

	s.	d.		s.	d.
at, per bushel	9	0	Veal, per lb.	0	7
e, per bushel	11	0	Fowls, per pair	6	0
r, per 100 lb.	26	0	Ducks, per pair	9	0
, per dozen	3	0	Geese, each	10	0
ter, per lb.	2	6	Turkeys, each	12	0
d, per 2 lb.	0	6½	Potatoes, per 112 lb.	25	0
, per lb.	0	4	Barley, per bushel	5	6
ton, per lb.	0	5	Oats, per bushel	5	6
, per lb.	0	8	Onions, per lb.	0	3

The Governor, true to the traditions of his office, sought to rigours of a season of drought by a general order, dated the 30th ber, 1828, in which, with the view of enabling the bakers the meet the demands of the public, and of keeping down the price as far as the means of the Government would permit, he sig intention, until the ensuing crop should be available, of putti auction sale a portion of the wheat in the public stores on eac sive market day, in lots of 24 bushels each, for the accommo the small dealers. These sales were to be conducted for ready and the profit, if any, after defraying the cost of the wheat charges incurred by the Government in procuring it, was to l priated to a fund for the supply to poor settlers of seed-mai cattle at this time were quoted at £3 per head, wethers and ma at 15s. each, female lambs at £2, and ewes at £2 and £3. 1834 wheat fell as low as 3s. per bushel, and rose in the latter pa year as high as 14s. Prices were, however, subject to much tion, particularly those for articles which were not prod the country. The long absence of a ship from China with from the Mauritius with sugar, sometimes produced a rise price of these articles of 100 to 200 per cent., to be foll the arrival of the vessel by a relapse to ordinary prices. bread was sold at 7d. to 8d. per 2-lb loaf, and flour at 14s per 100 lb. In 1835 beef was 2d. per lb., sugar 2½d., and tea 2 In times of flood or drought flour has been known to rise from £50 per ton; and wheat from Van Diemen's Land fetched a 20s. per bushel in 1828. In 1834 the price of flour was 100 lb., and the reputed 2-lb. loaf sold at 8d.; maize was 3s bushel; beef, by the quarter, 1½d. per lb.; mutton, by the carc per lb.; pork and veal, 3½d.; salt beef, 2¾d.; bacon, 1s. 2d.; from 10s. to 12s. per cwt.; tobacco, 6d. per lb.; mould cand "dips," 5d.; soap, 4d.; salt pork, 5d.; fresh butter, 1s. 1 butter, 1s. 4d.; cheese, 6d.; the 4lb. loaf, 1s. 2d.; fowls, 2s. ducks, 3s. 6d. per pair; geese and turkeys, 4s. each; and egg per dozen. Ration bread was frequently made from the meal o rye, oats, buck wheat, Indian corn, peas, beans, rice, and potato the different classes of bread were distinguished as "Standard bread," "Household," and "Mixed."

Rentals in those days were high. In 1831 houses in Sydn on leases of ten years, and the whole expense of erecting including the lease rent, did not exceed £200 each, were t soon as they were completed at a weekly rental of 25s. In rent of a house of two rooms in Sydney was from 5s. to 10s. per w a cottage of two or three rooms commanded 14s. per week renta houses were supplied with water, so that an additional out involved to meet this necessity; yet single men could obtain b lodging for 10s. 6d. per week, though the amount generall between 12s. and 14s., if washing were included. Boots, sho ad other articles of clothing appear to have been exceedingly

principal articles of manufacture were coarse woollen cloths, e-tree hats, salt, candles, leather, boots, and drain-pipes and other nware. The export of wool rose very rapidly. Excluding the e of Tasmania, in 1821 it was 175,400 lb. ; in 1825, 324,000 lb.; 1830, 2,000,000 lb. The surplus produce of the coal-mines at stle, after the wants of the Government establishments had been ed, were authorised by a Government order, dated the 9th May to be sold at the pits to those wishing to purchase at a fixed rate 6d. per ton, and the proceeds of such sales were collected at the ns as the cargoes came to be discharged in Sydney. From the ncement of the year 1828 the revenue from these sales was ed to be paid over to the Commissariat Department as a contion towards the maintenance of the bond population. The annual ction of coal was usually about 4,000 tons. The mines were ards transferred to the Australian Agricultural Company.

ring this period repeated efforts were made to improve the condition currency and reduce it to a fixed standard of sterling value and ination. Up to 1826 the circulating media were mainly Spanish s and notes of the Bank of New South Wales expressed in Spanish s. A Government order, dated the 5th February, 1823, directed the public accounts should be kept in dollars and cents, and this remained in force up to the end of the year 1825. It continued, er, to be the almost universal practice in the colony to express tes and sums in the first instance under British denominations, y rendering it necessary, before any sum could be brought to account scribed in the general order, to calculate the amount in dollars, he inconvenience of the operation was further increased by the ity in the nominal value set upon the dollar. In ordinary business ctions this coin was rated at 5s. ; in payment of the salaries of officers, at 4s., and from the 1st July, 1825, at 4s. 4d. ; in the of pay to the military, at 4s. 8d. ; and in the collection of Colonial at the highest rate for which it was received by the latest public rs made to the Commissariat. It is readily conceivable that so hus a system must have been attended with great inconvenience. s determined, therefore, by the Lords Commissioners of the King's ury, to introduce into the several colonies a uniform currency rling denomination, and in furtherance of such determination h silver and copper money was sent to the Commissariat Department in the year 1826 to the amount of £50,200 ; in the following year e amount of £13,210 ; and in 1829 to the amount of £20,000 ; for the years mentioned a total sum of £83,410. These ances, with the sums introduced by private individuals, which estimated at from £40,000 to £50,000, furnished the settlement a circulating medium of British coin amounting to £130,000. rtheless, up to the year 1829 transactions between individuals

continued to be regulated partly in British coinage or in Spanis
at the declared sterling value of 4s. 4d. each, and partly with r
to the former rate of the dollar, viz., 5s.; or, to employ the
appellation by which these two standards were distinguished, p
"sterling," and partly in "currency." The tradesman's notes
period were almost invariably expressed in "currency" denom
and the rewards offered for various services in the columns of t
temporary press nominated amounts in Spanish dollars. After th
of the new coinage, as shown by contemporary evidence, the
Treasury was for some time obliged to issue the dollar at its
sterling value of 4s. 4d.

In connection with the question of the country's currency it is i
ing to note a general order, dated the 22nd September, 1828, i
the Governor announced his willingness to receive the ring doll
dumps issued under the proclamation of Macquarie in 1813,
grant for them bills at the same rate as for British coin on th
Commissioners of the King's Treasury, or to give in exchange f
British coin to the value of 3s. 3d. sterling for the ring, and 1s.
the dump; but in a general order issued in 1829, sterling v
"currency" issued to troops was affixed to the French 5-franc pi
2-franc piece, and the franc; to the Sicilian dollar, or scudo, th
of-forty, and the piece-of-twenty; to the Spanish dollar; to the
States dollar; and to the Calcutta, Bombay, and Surat rupee.
the elimination of foreign currency seems to have been a very slow

The period under notice was marked by considerable mercant
speculative activity. In 1826 the Bank of Australia was ins
and in 1832 the Savings Bank was established by the Gove
Council, the latter institution allowing interest on deposits at t
of 5 per cent. per annum, with a division among the depositors
surplus interest at the end of each year. The same epoch is
also for the establishment of the Australian Agricultural Co
whose immediate influence upon the development of the coun
not altogether of a favourable nature. The Australian Marine
ance Company was established in 1831.

Up to the time of the advent of Sir Richard Bourke, the Go
had been empowered to make grants of Crown lands to privat
viduals, and charges were frequently insinuated of undue favo
to call it by no harsher word; and a retiring Governor was s
reprimanded for making a grant to his successor, who, on assum
Government, made a similar grant to his predecessor. But i
orders from the Colonial office directed the introduction of
system with regard to the disposal of the colony's Crown land
free grants were to be confined to such as were made to
churches, and other public institutions, and the only other me
alienation permitted was to be by sale at public auction, under
of restricted competition. Prior to the limitation of the sy
making grants of land, immigrants were entitled to receive

r 1 square mile of territory for every £500 of capital immediately for its cultivation, to the extent of 4 square miles or 2,560 he limit within which the Governor was authorised to make o one individual. Persons possessed of a capital less than ear of all expenses of reaching the colony, were for a long time idered as eligible to receive grants of land; but a subsequent on extended the privilege to them, as well as to natives of ny who were of good character, the grant in such cases com- from 50 to 100 acres in any of the districts which had been set or the settlement of small farmers. The condition of tenure ual residence upon the land granted. The regulations under he grants were made were quashed by Viscount Goderich, rds Lord Ripon, who set upon all unalienated land in the a minimum price of 5s. per acre. With the institution of this n law, the industrial history of New South Wales entered upon hase of development.

THIRD INDUSTRIAL PERIOD, 1838–1843.

third period in the industrial history of the colony may be said opened under favourable auspices. Immigration was encouraged s of public money, and, as a consequence, the population within rs increased by nearly 80 per cent., or at the rate of more than a year. Settlement in the southern portions was gradually ng, the discoveries made by Sir Thomas Mitchell and others thrown open to occupation large areas of country, which gave to f all kinds a powerful impetus—an impetus which was accele- y the amendment of the land laws. At the beginning of this all available Crown lands could be rented under lease for the f one year. The lease was put up to public auction at a rental for each section of 1 square mile. In the event of the land sold, the lessee was required to surrender it on one month's Should the land not be sold, the lease was again put up to , whether the occupant made application to that effect or not; ould it not be re-let the fact was notified accordingly. The um price of land was raised by Act of Parliament in 1842 to acre, although, of course, it sometimes fetched very high prices t localities.

raising of the minimum price of Crown lands immediately operated ck upon the land sales, the revenue derived from this source rapidly ing away almost to nothing. In 1839 the sale of Crown lands d £152,962; in 1840, £316,626; in 1841, £90,387; in 1842, 4; in 1843, £11,297; and in 1844, £7,402. It was an under- hing that the money received from the sale of the Crown lands be devoted exclusively to the promotion of immigration and the shment of the colony's labour supply, without which cultivation not be extended in an equal ratio with the acquisition of estates italists and settlers; but when the land fund was exhausted there

was necessarily an end to bounty-fed immigration, and Sir
Gipps, in his anxiety to raise money for this purpose, embroiled
with the squatters by imposing upon them special agrarian leg
which they considered particularly grievous and unjust. The
Governor, Sir Richard Bourke, had treated the natural p
situated outside the "boundaries of location" as commonage.
available to all desirous of making use of it for depasturing the
and herds, provided that it was not wanted by permanent settl
therefore he demanded from squatters making use of it only a
license fee of £10, to which was subsequently added, at the ins
these pastoral licensees, a small imposition of so much a head
horses, sheep, and cattle, in order to provide for the establishm
support of a border police for service in the squatting districts.
the Gipps regime, as the revenue from the sale of land had faile
thought that the squatters could be compelled to contribute t
purchasing land at the minimum price, and thus to supply fu
immigration purposes. This measure of the Governor was m
counter effort on the part of the squatters, who laboured, a
successfully, to obtain regular leases of their squattages, with f
tenure and pre-emptive rights. A war of interests was thus
between the pastoral and agricultural industries which it too
of agitation and much legislation to allay.

The practice of assigning prisoners to selectors ceased ab
beginning of this period. The dispatch directing Governor Bo
discontinue the system was dated 26th May, 1837, and the syste
to an end in 1838. This event made the introduction of free la
almost imperative, and led to the activity in immigration
referred to. A Master and Servant's Act, passed during the a
tration of Sir George Gipps, throws considerable light u
conditions of labour during the period. This measure provide
artificers, manufacturers, journeymen, workmen, shepherds, la
and other servants, who should refuse to serve the time o
engagements or return or leave any work uncompleted, or who
absent themselves from or refuse to work, might, upon the oath
or more credible persons, be brought before two justices of the
and upon conviction, in cases where the amount due for work done
exceed £30, be adjudged to forfeit all or part of the wages due
time proceedings were instituted, and to pay a sum not exceedin
the amount of any damage incurred through neglect, absence, o
cause. In default of payment, the offender was committed
common gaol, without bail or mainprize, for any time not ex
three calendar months, unless the amount in which he was mu
sooner paid. Masters against whom judgment had been gi
recovery of wages could, upon non-payment, be moved against by
and sale, and for want of sufficient distress could be sent to gao
term not exceeding three calendar months if the claim was not
satisfied. Servants obtaining advances and afterwards abscon

sing to perform the work for which they had been engaged, could be sent to gaol for a term not exceeding three calendar months, or he house of correction, with hard labour, for the same term : and in these proceedings against workmen there was no need to prove the atures of witnesses to indentures of service. Persons employing ants whose engagements with other persons had not expired were d not more than £20, nor less than £5 ; and the servant who could proved to have spoiled, destroyed, or lost property was adjudged to double the value of such property, and also, if a male, committed gaol for a term not exceeding three calendar months. Female nders were exempt from being sent to gaol under the provisions of Act. Such were the restraints imposed upon both masters and kmen, and such the restrictive legislation, enforced with fines and prisonment with hard labour, which the wisdom of our forefathers lved to stimulate the industries of the young colony, and to ensure development.

An interesting relic of the period is preserved in the form of a bour agreement. So many disputes arose between master and man pecting wages and conditions of service that it became customary for ployers and workmen to have written agreements. The following is copy of one such document :—"Prosser's Plains, December, 1842. e undersigned, John Gudge, agrees to serve Mr. Nathaniel Olding as farm servant on such work as may be required, to assist as gardener, any other work, to work as a shoemaker for the family and ablishment when required, for one year, for the sum of £25. One nth's notice to be given. The weekly rations to consist of 12 lb. r, or 14 lb. bread ; 9 lb. mutton or beef, or 6 lb. pork ; 1½ lb. sugar; d 2 oz. tea. All other things which John Gudge may require are to charged against him as part payment of his wages."

When the State was compelled, by reason of lack of money, to leave settlers to their own efforts in regard to procuring labour, various mes were propounded by which a continuous and cheap supply ght be obtained, and some of these were carried into effect. Mr. jamin Boyd introduced several shipments of natives from Tanna d the New Hebrides, and employed them as shepherds ; but the periment proved a failure, as the islanders would not apply themelves to the work. Moreover, the local legislature interfered, and terdicted, by enactments, what it regarded in the light of an attempt establish a new slave trade. The attention of the colonists was, owever, chiefly directed to the possibility of procuring labour from e East Indies or from China, but immigration from such sources was emed inadvisable or unattainable. An agitation on the part of ployers anxious to engage cheap labour from India was begun, only be quenched shortly afterwards by a wave of counter-agitation on the art of the free labourers of the colony. The largest public meeting ver held in New South Wales up to that time was convened to protest gainst the introduction of hill coolies from India. In the city of Sydney more than 4,500 signatures were obtained to a petition on this sul presentation to the Queen; and Lord Stanley, Secretary of State Colonies, expressed, under date the 29th September, 1843, his dis of the project, and refused to it the sanction of the Imperial Gove

The Committee on Immigration, in its report to Sir George stated that in consequence of the great dearth of labour, particu pastoral labour, the flock-masters had been driven to exhau expedient to increase the service derivable from the number then employed. Three or four times the ordinary and proper sheep had, it was reported, been placed under the charge of ea vidual shepherd, and many squatters had been forced to aban rearing of lambs in consequence of being unable to provide for t of augmented flocks. The demand for labour of a pastoral ch appears to have been continuous; and fresh employers we arriving and adding their demands for labour to those of the settlers.

Appended is an interesting return of the immigrants who in New South Wales during the year 1840, and of the am which they were engaged:—

Males, per annum, with rations.

	£	
1,032 Agricultural labourers ...	25	54 Grooms and coachmen ...
16 Bakers.....	50	6 Millers ..
10 Butchers	40	35 Ploughmen
2 Cooks	35	1 Seaman
61 Domestic servants	30	108 Shepherds
18 Farm overseers	40	2 Shopkeepers
62 Gardeners	40	8 Stockmen

Males, per day, without rations.

	s.	d.	
59 Blacksmiths	7	0	1 Nailer
67 Boot and shoe makers ...	6	8	24 Painters and glaziers
1 Brazier	6	8	4 Plasterers
9 Bricklayers	7	0	1 Plumber
4 Brickmakers	7	0	11 Printers
19 Cabinet-makers	7	6	6 Quarrymen
83 Carpenters and joiners...	8	0	13 Saddle and harness makers
9 Coopers	6	8	13 Sawyers
7 Curriers	6	0	3 Shipwrights
7 Engineers	10	0	41 Tailors
1 French-polisher	6	8	9 Tinsmiths
30 Masons	7	0	9 Turners
22 Mill and wheelwrights...	6	8	2 Upholsterers
2 Miners	5	0	5 Watchmakers

Females, per annum, with rations.

	£	
19 Bonnet-makers	14	17 Kitchen-maids
26 Cooks	20	12 Ladies' maids
97 Dressmakers	18	2 Laundresses
313 Farm servants	14	14 Milliners
7 General servants	16	35 Nursery-governesses
517 Housemaids	15	138 Nurse-maids

ydney and other towns it was customary to hire workmen on nly, lodgings and rations being their own concern ; but in the . not only shepherds and pastoral workers generally, but black- and wheelwrights and other artisans were lodged and rationed ng to a regular scale. At the beginning of the period, carpenters, masons, shipwrights, wheelwrights, cabinet-makers, plumbers ziers, harness makers and shoemakers could earn from 5s. to 8s. : working overseers, gardeners, and woolsorters varying rates £30 to £70 per annum, together with lodging and rations; men, stockmen, shepherds, and brickmakers, from £15 to £35 dging and rations; and labourers from £15 to £25 with lodging tions, the rates of wages being regulated according to the lities of the workmen.

839 there was a great increase in wages, an ordinary mechanic able to earn from 8s. to 12s. per day, and a farm labourer from £30, with, of course, a hut to live in and his rations; but so artisans' wages were concerned their increase was coincident rise in the price of provisions. In the year 1840 contemporary pronounces wages as being very high: shepherds, for instance, ng from £30 to £40 a year and rations; labourers in Sydney nes as much as 7s. and 8s. per day; and female domestic servants year, with board and lodging. These were considerable advances wages of the old assignment times, when free labour was thought mply remunerated at £14 and £16 per year and rations. Wages 1841, when mechanics could be hired at 7s. 6d. or 8s. per day, ervants at £22 per year, and domestics at £12. In 1843 the of station servants, shepherds, hut-keepers, and others declined to er annum, and even less. Sheep-shearing was paid for at the 15s. per 100, and sheep-washing at 3s. per 100. The rations out were valued at £12 per annum, and comprised flour, meat, d sugar.

1838 and 1839 the crops failed, and in 1840 they partially and during these three years, also, the price of wool declined 2s. to 1s. per lb. For provisions in 1838, quotations were as : —Potatoes, from 7s. to 15s. per cwt.; bread, 4½d. per 2-lb. loaf; nd mutton, from 4d. to 5d. per lb.; cabbages, from 2d. to 4d. flour, best, 17s. per cwt., and seconds, 13s. per cwt. The year was, however, a year of drought and scarcity, and prices rapidly the position already indicated. Flour ranged from £50 to £80 n; cattle from £8 to £10 per head; and sheep from 30s. to r head. Clean wheat was quoted at £1 2s. 6d. per bushel; £18 per ton: and fresh butter at 3s. to 3s. 6d. per lb. Bread ld at 7d. per 2-lb. loaf, with a subsequent rise to 8d.: potatoes 1d. to 2½d. per lb.: meat, from 3d. to 5d. per lb.: and the of other articles in common use were proportionate. The colony this time greatly dependent upon Van Diemen's Land for supplies eat and flour. Much of the grain-growing land in New South

Wales, especially that adjacent to Sydney, had gone out of culti through exhaustion, and the increased interest taken in the rai stock superseded agriculture to a considerable extent, and a peri scarcity at once threw the parent colony on the grain resources island. In the period embraced from the year 1838 to the August, 1843, no less than 1,120,462 bushels of wheat, inclusive made into flour, were exported from Van Diemen's Land, the portion of which found its way to Sydney.

At the beginning of the year 1840 the price of flour in Sydney from £30 to £41 per ton, and wheat was selling at 12s. to 13s. bushel; but as the year advanced wheat went steadily up in price, the 4lb. loaf was 1s. 6d. Quotations for butchers' meat in the were as follow:—Beef, 7d. per lb.; mutton, 5½d.; and pork, 10d. the month of August flour at the Sydney mills ranged from £30 to for fine, from £30 to £31 for seconds, and £28 for ration. A vi to Sydney at this time quotes the following prices for various artic diet:—

	s.	d.		s.	d.
Turkeys, each	25	0	Eggs, each	0	4
Geese, each	12	0	Butter, per lb.	4	0
Ducks, per pair	8	0	Milk, per quart	1	0
Chickens, per pair	6	0	English ale, per glass	0	6

The retail prices of provisions in Sydney for the quarter ending December, 1841, were quoted as follow:—

	s.	d.		s.	d.
Wheat, per bushel	6	8½	Meat, fresh, per lb.	0	4½
Flour, per lb., from 3¾d. to	0	4¼	Salt, per lb.	0	2½
Tea, per lb.	4	9	Soap, per lb.	0	9½
Sugar, per lb.	0	5¼	Tobacco, per lb.	4	10½

There was a general decline in the prices of provisions in 1842. wh beef in the towns ranged from 2½d. to 4d. per lb., and mutton from to 3d. The price of flour during the same period ranged from £14 £24 per ton. In 1843 wheat in Sydney ruled, according to quali during a portion of the year, from 4s. to 5s. per bushel; and flour fr £12 to £16 per ton. Meat was sold at 1d. per lb., and tea at 1s. per lb. At the end of the year wheat was selling in Sydney at 4s. per bushel, while the prices in the other Australian cities were as fo low:—Hobart, 3s. 9d.; Melbourne, 3s. 6d.; and Adelaide, 2s. 6d. p bushel.

House-rent and lodgings were very high-priced in Sydney, altho in the country districts they were reasonably cheap. A house suita for the residence of a mechanic and his family cost from 15s. to 1 per week. From the Census of 1841 it would appear that the de for residential accommodation so considerably exceeded the sup that people were compelled to take up their quarters in habitati the hands of the builder, no less than 809 such dwellings being d prior to their completion. In the country districts a hut e for the residence of an agricultural labourer cost to erect £10; but it was, of course, a very inferior description of building. withstanding the salubrity of the climate, and the reiteration of nt writers as to the small amount of clothing necessary to be worn w South Wales as compared with the United Kingdom, labourers, rticularly agricultural labourers, required a quantity of strong ng, apart altogether from any question of climate; and this in the 1840, when wages were regarded as being particularly high, was expensive. In 1842, when wages had fallen considerably, the clothing still remained sufficiently high to constitute a serious on the earnings of a man in receipt of 6s. or 7s. per day, or from £20 per year with rations. According to a list of prices, bearing 30th June, 1842, the following quotations represent the cost of ost necessary articles of clothing, and of some other goods, on that —

Men's Clothing.

	£	s.	d.		£	s.	d.
d shirts, each	0	3	3	Boots, per pair	0	10	0
rousers, per pair	0	12	0	Socks, per pair	0	1	6
in trousers, per pair	0	12	0	Vests, each	0	4	0
in jackets, each	0	12	0	Shepherd's coats, each	1	10	0
hats, each	0	5	0	Handkerchiefs, each	0	1	0

Women's Clothing.

	£	s.	d.		£	s.	d.
es, each	0	5	0	Aprons, each	0	2	0
ats, each	0	10	0	Stockings, per pair	0	2	6
(print), each	0	10	0	Shoes, per pair	0	7	6
s and caps (print), each	0	9	3	Stays ,,	0	15	0
, each	0	10	0	Merino dresses, each	1	5	0

Other goods.

	£	s.	d.		£	s.	d.
ts, per pair	0	12	0	Rugs, each	0	5	0

Mattresses, each 0 12 0

hing was, however, the only thing which the yearly servant was l to purchase, save articles of luxury, such as tobacco, for which ht have a desire; abundance of the common necessaries of life, s meat, bread, tea, and sugar, together with a hut to live in, being ed by the employer. From £7 to £10 per year might be allowed purchase of such rough clothing as was necessary for bush wear; although the cost of living had increased considerably, the ultiwages that remained to the labourer were higher during this than at any time since the foundation of the colony. These vere not, however, long maintained. The position of the mechanic towns was somewhat different from that of the agricultural er in the bush. The former, besides having to bear the cost of ng himself, was obliged to rent a house to live in or to hire lodgings, and to purchase food and fuel; but a mechanic earning £125 pe could allow £62 to cover the expenses of his own rations, ind bread, meat, tea, and sugar, and house rent, fuel and clothing, would still have £63 left with which to provide for a wife and and this was a considerable advance on the labour conditions preceding period, or such as were obtaining in England.

The opening years of the period were marked by the floati assurance, auction, steam navigation, and other joint stock com and by general speculative activity. Capital for investment on be English companies and on private account was abundant. The ce of transportation,* however, though it ultimately proved advant to the community, had an immediate result in stopping the expe in the colony of large sums from the British Exchequer: and the ef this cessation of expenditure became visible almost simultaneousl a reaction after the inflation of 1839 and the following year. fell, property became depreciated in value, and ruin impended. action of the Government helped to bring matters to a crisis. proceeds of the land sales, amounting at one time to fully £35 were lodged in the banks, and the highest rates of interest were ex hence the banks were obliged to reissue in discounts the proc those identical sales, the original purchase-money for which was sented by paper. When the bounty system of immigration was height, the Government drew out their deposits almost as rap they had lodged them. This action obliged the banks to su restrict their discounts, and gave the initial downward impulse money market.

It was the fashion at the time to attribute all the reverses s by the colony to a cessation of the system of assignment of labour; but this was obviously not the case, although it can denied that the condition of affairs was temporarily made mor by the policy of the Government. The period was one of com and social transition and adjustment, during which fresh financi industrial conditions were being arranged, and the communit unconsciously preparing itself for vast changes and new develop Repudiation was the order of the day, and hundreds availed then of the insolvency law, which came into operation on the 1st Feb 1842, and which was designated by the satirists of the ti "Barton's Purge," in allusion to the author of the legislation. A the insolvents in Sydney and its neighbourhood, from the last-men date to the 4th August of the same year, a period of six months an days, covered a sheet larger than a page of the *Morning Heral* included the names of 392 persons and firms. The liabilities of of the estates were, considering the times, enormous, ranging fro to ten, twenty, thirty, forty, and fifty thousand pounds, whi failure was for £175,235. The total amount of the liabilities of 392 insolvents was, in round numbers, a million and a quarter st although many of them were able to show good assets. From t ary, 1842, to the 31st December, 1843, the insolvents numbered s than 1,135; and of these 600 belonged to the eleven months g the 31st December, 1842, and 535 to the succeeding year. g 1843 a local ordinance was passed for the abolition of incaron for debt, and came into operation on the 1st April of the year.

e failures caused credit to sustain a general and severe shock; was an extreme contraction of the ordinary course of trade, a absence of speculation in business, and, consequently, a great ution in the amount of legitimate transactions. Vigorous efforts made to realise funds for the discharge of existing debts, and rty was forced into the market for sale until purchasers could y be found at any price, and the inevitable result was that persons n to be possessed of large properties were unable to meet their gements. In most of the country districts orders on Sydney agents the medium of circulation used by the settlers, and when these no r passed current, as in times of confidence and prosperity, specie h did not really exist) was demanded, and thus great sacrifices rendered compulsory, because property, though of intrinsic worth, sed no exchangeable value. Historians of the period narrate cases forced sales in which sheep fetched very small prices, sometimes le as 6d. being obtained for them, while cattle occasionally realised tle as 7s. 6d., and valuable horses only £3 each.

e Legislative Council, imagining that the very existence of the y was threatened by the prevailing state of things, sought to rt ruin" (to use their own expression) by "pledging the public ," but the Governor refused the Royal assent to the Bill passed at purpose. It was then proposed to issue Treasury bills, but the cil would not entertain the idea. The failure of the Bank of alia, the liability of whose shareholders was unlimited, brought s to a crisis, and it was proposed to relieve the shareholders by a mpowering the bank to dispose of its assets by a public lottery. ttempt was made to defend lotteries in general, but it was cond that if the goods of proprietors of the bank were seized under tion, the bailiff would be seen in possession of one house in every ten dney, and the result would be a panic which would altogether ilate the value of property. Under pressure of such an argument is, the "Lottery Bill" passed, but was disallowed by the British rities. The necessity of the case was so urgent, however, that the y took place, and was successfully completed before the law officers e Crown could interfere to prevent it.

hen matters were at their worst, and the price of sheep had fallen, ommon quotation, to 1s. per head, there was made what was hailed "great discovery," viz., the boiling down of sheep exclusively for w, for which product there was then a good market in Europe. rice of sheep was thus raised to 3s. or 4s. per head, 5s. or 6s. worth llow being obtained by the process of boiling down. Consequently, in a brief space of time tallow began to occupy a chief place article of export with wool and coal. Other staple products were oil, black whale and sea-elephant oil, seal-skins, wattle-bark, sal hides, sheep-skins, and kangaroo-skins. The meat-canning in was attempted by Mr. Sizar Elliott, of Charlotte-place, Sydney, Mr. Laidley, but it was not a success financially, although the pre meats were, it is said, of excellent quality.

Commercial relations were opened up during the period with Kong, as well as with British India; and the trade, which was pally in horses, was of a profitable character. For some general exports of the colony, the prices ruling in the London in the year 1840 were as follow:—Bark (mimosa), per ton, £11 t gum (kino), per cwt., £20 to £30; hides, per lb., 3¾d. to 4 (southern), per tun, £24 to £25 10s.; sperm oil, per tun, £110 to whalebone, per ton, £135; wool, per lb., 10d. to 2s. 7d.: and ced foot, 4½d. to 5½d. During the year 1839, the exports of the pr the southern fisheries comprised 12,029 tuns of black oil, val £41,341, despatched principally to Great Britain; and 12,079 sperm oil, valued at £111,280. The fisheries were, however, an in which the colony was outgrowing, and they were being eclipsed value of their export by wool. In the year 1840 the product of the fi exported was valued at £224,144, while the wool exported was va £566,112, and the latter thenceforward began to be regarded leading staple of the colony. Towards the close of the peri whale and seal fisheries became gradually diverted from Sydney into the hands of Americans, who subsequently absorbed alm entire industry in Southern waters. Some of the products of the fi continued to find their way to Sydney for re-export after the i ceased to be prominently Australian, but even this advantage port was lost shortly after the gold discovery.

FOURTH INDUSTRIAL PERIOD, 1843-1852.

This epoch in the industrial history of the Colony is intimatel ciated with the names of Sir George Gipps and Sir Charles Au Fitzroy. The closing years of the previous period were, as just na marked by financial failures and general insolvency. It was a tim a live sheep was found to be worth less than the fat of a dead one wool had fallen 50 per cent. in price in the London market; when t fit derived from the whaling industry was suffering a serious shri when all commercial activity was in a condition of languishme speculation was practically at an end.

Although the year 1843 ushered in a period of depression an continued distress, an intermittent system of immigration was car but not nearly to the extent desired by the settlers. Nevertheless the Legislative Council was petitioning for the continuous intro ue supply of shepherds and agricultural labourers, the Govern- during the same year was compelled to give employment to a umber of labourers. Many workers left the colony for Valparaiso her places, and certain discontented immigrants had departed Port Phillip for the Cape of Good Hope. The probability is was not labour which was hard to obtain, but "cheap" labour, meet this demand various expedients were resorted to, the ding most favour being the proposal, revived from time to time, roduce hill coolies from India. This proposition was, however, ly opposed by the people of the colony, but, as before stated, the ary of State refused to it the sanction of the British authorities.

demand for labour at this period was confined almost wholly to erds and other pastoral workers and domestics. The Governor, patches under date of August and September, 1843, stated that ney considerable numbers of workmen had been thrown out of yment in consequence of the check that the building trade had ed by the general pecuniary distress and the reduction in house- and he added that the arrival of immigrants in any great numbers such circumstances must prove injurious to all parties. But olicy pursued by the Legislature, which represented exclusively terests of the propertied class, was to promote competition in the of labour by excessive immigration. During the year 1844, as as 10,000 and 12,000 immigrants were demanded as an annual rt" from the United Kingdom; but the sales from the waste-lands colony had practically ceased and there was no other fund from the passage of immigrants could be paid, and great discontent anifested because the British Government entered into a contract free transmission of only 4,000 adults. In 1846 requests were by the Legislative Council for the despatch from the United dom to New South Wales of 12,500 emigrants annually, to be up of 4,000 or more men, an equal number of women, and, in the f married couples, of an equal proportion of children; the same of immigration to be continued for a period of not less than three

The Governor recommended that the immigrants imported at blic expense during the year in question should number 4,000; uring the ensuing two years, 9,000. The fact is, that elaborate ations were for ever being made of a proportionate occupation of ands, and a proportionate increase in flocks and herds, based on perience of past prosperous periods. No allowance was made for ssibility of the new areas opened up turning out sterile, arid, and pted for grazing purposes; no discount was allowed for flood or ht, or a fall in the price of the staple; hence the requisitions for troduction of labour for years ahead were nearly always based an over-estimate, and the unfortunate immigrants were, of course, rincipal sufferers.

ny of the large stock-holders of this period were enthusiastically in of a return to the old system of the assignment of bond labour, although the inhabitants of the towns were naturally just a opponents as the property-owners were advocates of that polic British Government would willingly have fallen in with the v the stockholders, but the objections of the rest of the communit be considered. A scheme of compromise was, therefore, p Offenders were not to be sent direct to the colony to serv sentences, as was the case under the old transportation syste direct penalty of their crimes was to be enforced in the English and when this was over they were to be given tickets-of-leave a on a sojourn of a reformatory character to the colony. The pleased no section of the community, although it did not lack tial local advocates. In the colony it was generally argued t adoption of such a system must utterly destroy the value of fre and annihilate wages, while the mere fact that New South W managed to slip her early shackles was held by many to be a s reason for resisting any attempt to reimpose them, no matte euphemism might be adopted to cloak the movement.

A considerable number of the flockmasters held the view—a p reasonable one—that while the morale of the probationers w no better, and probably, on account of greater license, much than that of the assigned servants of a former day, their own control over their labourers would be very much less. T immigrants, compelled to work for their living as emplo others, scented dangerous competitors, whose introduction i colony might result in a depreciated wage; and the employers emancipated class saw only the revival of a caste reproach. recrudescence of hated social distinctions. It must not, how imagined that Lord Stanley and Earl Grey acted with any inconsiderateness in continuing the transportation of convicts South Wales and Van Diemen's Land. The great employe absorbers of "abundant and cheap labour," were the real ruler country. From their ranks were chosen the members of the Le Council; they had the ear of the Governor; and the Governor, had the ear of the Secretary of State for the Colonies: while the authorities were only too anxious to relieve the over-crowded c of their gaols. Two powerful interests, therefore, were allie effort to re-establish transportation and the system of assignme meet this threatening combination, a number of public meeting held in Sydney under the auspices of the Anti-transportation and an overwhelming expression of popular opinion, most veh adverse to the scheme, was given; nevertheless the British Gove under the advice of Sir Charles Fitzroy, persisted in its endea force prisoners upon the unwilling inhabitants of the colony.

Several ship-loads of convicts were sent out, and an attempt w to land them at the new settlement at Port Phillip. The settle however, would not tolerate the proceeding, whereupon th were compelled to leave for Sydney and Moreton Bay. One named the Hashemy, cast anchor in Port Jackson, on the 8th 1849, and there instantly ensued a serious contest between the ants and the Executive. Immediately upon the fact becoming y known that the Hashemy was off the Heads with convicts rd, the people of the metropolis were lashed into a fever of nent, and a great public meeting was forthwith convened to er what steps should be taken in this pressing emergency, as it iversally considered. The result was that the Government saw orbid the landing of the prisoners at that time, not caring to face loquy and public indignation which the adoption of any other would certainly have brought upon them. As, however, the Has- could not be sent back, and her prisoners could not permanently n on board, a compromise was entered into. The prisoners were ed from the ship, and a large number sent to Moreton Bay, in that the settlers in that district might have an opportunity of them. The remainder were allowed to be assigned to various s in the colony, though it was stipulated that the men should landed in Sydney, nor employed in the county of Cumberland. Legislative Council afterwards proceeded to take action in the r, and a resolution was prepared to the effect "that an address sented to Her Majesty, praying that the Order-in-Council which ed New South Wales a colony to which convicts might be sent, once revoked." The adjournment of the Council was, however, d to before the motion could be put. In consequence of this partial ng of the question a great public meeting was held, at which it was d to petition the Council to use its utmost endeavours to prevent vival of transportation in any form. The petition, within a short was signed by upwards of 35,000 persons, or by more than two- of the population of Sydney. There was no resisting this mani- ion of public opinion, and the pro-transportation members tempo- withdrew from the Council, whereupon the motion just stated arried unanimously, and the address to the Queen was accordingly mitted. The Order-in-Council was revoked, and transportation to South Wales was thus, after many years of fretful agitation on sides, finally abolished.

th the disappearance of the convict from the stage of industrial the immigrant became an object of greater attention than ever . Various schemes were mooted by the sheep and cattle breeders cure labour at the old rates. One of these schemes was the intro- n of expired-sentence men from Van Diemen's Land, and associ- were formed for the purpose, both in the parent colony and at Phillip. That the efforts of the associations were not ineffective ved by the fact, given in a return printed by order of the Council, n 1847 the number of persons leaving Van Diemen's Land for ther colonies amounted to 4,787 ; in 1848, to 3,799 ; in 1849, to ; in 1850, to 4,146 ; and in 1851, to 6,931 ; or a total for five of 24,280.

Towards the close of the period, and in consequence of the decli
several of the leading industries, a new view began to be taken of
possibilities of the climate of New South Wales, inclusive, of cour
the northern sub-tropical districts of what has since become the co
of Queensland ; and regulations were issued with the view of promo
the introduction of foreigners to cultivate such commodities as w
oil and silk, which could not be produced in the United Kingdom,
for the tending or manufacture of which skilled labourers could
consequently be obtained in the mother country. Such colonists, th
fore, as desired to employ their land and capital in the productio
the commodities indicated, were offered by the Government a bount
£36 for a married man and his wife (the age of neither of whom sh
exceed 50 years), and a bounty of £18 for each child, male or fe
above the age of 14 years, accompanying both parents, or one of t
It was recognised that the definition of the foreign labourers for w
bounties would be allowed was necessarily impossible, and any att
at such definition would have been inconsistent with the object in vi
to provide a supply of labour requisite for the progressive develop
of the capacities of the soil as they might from time to time be
known. As a general rule, however, the Government intended to
the allowance to such labourers as were requisite for raising articles w
were the produce of the soil, and for bringing them into their sim
marketable shape. In illustration of this principle, wine and silk
instanced, viz., that in the case of the former, bounties should be of
for every description of labourers necessary for the culture of the g
and the manufacture and casking of wine ; and in the case of the l
for all labourers required for the production and preparation of th
material, but not for its manufacture. Under this regulation, bou
were not allowed for such persons as overseers, nor for any labo
obtainable from the United Kingdom.

The number of each class of immigrants forwarded to the co
and arriving in Sydney during the course of a year (1848), is show
the following table :—

Class of Immigrants.	Males.	Fe
Agricultural labourers	1,782	..
Shepherds	171	..
Other labourers employed in the management of stock or cultivation of the soil	79	..
Domestic servants	41	1
Mechanics engaged in erecting buildings or in obtaining or preparing building materials	264	.
Tradespeople engaged in preparing or selling articles of food	53	.
Tradespeople engaged in making articles of clothing	20	
Other tradespeople, mechanics, etc.	331	
Total	2,741	1

astoral settlement was occasioned by the maintained and in-
value of all squatting property. The growth of the pastoral
has already been adverted to, and also the influence that the
overies had upon it—on the one hand retarding its develop-
depriving it of labour, and on the other hand, encouraging it
eation of a demand for carcase meat. In 1851 the number of
the colony was estimated at about 7,000,000, and in 1861,
er the subsidence of the wild days of speculative excitement,
0 ; hence the dearth and costliness of labour, together with the
for meat, appear to have been responsible for the decrease of
s to the extent of 1,000,000 head during the decade. The
statement shows the number of sheep in the colony at each
the period, together with the value of the exports of wool and
and lard :—

Year.	Sheep.	Exports of—	
		Wool.	Tallow and Lard.
	No.	£	£
1852	7,707,917	676,815	146,811
1853	7,929,708	999,896	134,708
1854	8,144,119	1,181,956	164,256
1855	8,602,499	1,078,017	123,255
1856	7,736,323	1,303,070	137,202
1857	8,139,162	1,275,067	82,134
1858	7,581,762	1,126,486	53,186

es and horned cattle, on the contrary, increased, although there
alling off in the latter in 1858. The number of pigs in the
gradually decreased to the year 1854 ; in 1855 they added
5,000 to their number ; in 1856, nearly 38,000 ; and in 1857,
00 ; but they declined in 1858 by over 16,000. The following
stock returns for the period :—

Year.	Horses.	Horned Cattle.	Pigs.
	No.	No.	No.
1852	123,404	1,495,984	78,559
1853	139,765	1,552,285	71,395
1854	148,851	1,576,750	63,255
1855	158,159	1,858,407	68,091
1856	168,929	2,023,418	105,998
1857	180,053	2,148,664	109,166
1858	200,713	2,110,604	92,843

Agriculture was greatly neglected during the days of the fever, and the sales of land realised far from what might have expected from the increasing influx of population. In 1840 there 126,116 acres under cultivation, and the land revenue for the year £316,626. In 1854, fourteen years afterwards, the number of under crop was 131,857, and the revenue from land sales, £319, The following statement shows the area under cultivation for each of the period, together with the revenue derived from the sale of colony's Crown lands:—

Year.	Area under cultivation.	Revenue from land sales.
	acres.	£
1852	131,730	55,808
1853	139,014	211,035
1854	131,857	319,533
1855	171,100	270,636
1856	186,034	245,555
1857	184,514	210,333
1858	223,296	240,633

In 1846 there were 183,360 acres under cultivation; in 1843 the had been 146,165 acres. A comparison between these years and th years quoted in the foregoing table will show how the agricultu interest had been brought almost to a standstill during the period the exploitation of the gold-fields. But the excitement caused by th pursuit of the precious metal not only had its temporary effect upo the pastoral and agricultural development of the colony: it retarde also the growth of its manufacturing industries, though it doubtle attracted hither the population to whom these industries owed thei subsequent revival, and who supplied labour to operate them. In th following table the mills and factories, together with the populatio the colony, are given for each year of the period, with a similar serie of facts for the preceding seven years:—

Year.	Population.	Mills and manufacturing establishments.	Year.	Population.	Mills and manufacturing establishments.
1845	181,556	266	1852	208,254	286
1846	196,704	262	1853	231,088	284
1847	205,009	266	1854	251,315	286
1848	220,474	305	1855	277,579	371
1849	246,299	354	1856	286,873	432
1850	265,503	388	1857	305,487	418
1851	*197,168	291	1858	342,062	464

* Decrease owing to severance of Port Phillip District.

h steam communication with other parts of the world, and the action into Australia of the railway system, new markets were created for the trade in coal, although it was not before the ence of the gold fever that they began to be availed of. The ty of coal raised in 1852 was 67,404 tons, and in 1858 over three s much, viz., 216,397 tons. In 1850 and 1851 the price of coal from 9s. to 10s. per ton; in 1852 it had risen to over 80s. per ton, gh it did not remain for an extended period at this high figure. antity and value of the production of this mineral during the under review were as follow :—

Year.	Quantity raised.	Average price per ton.	Approximate total value.
	tons.	s. d.	£
1852	67,404	10 11	36,885
1853	96,809	16 2	78,059
1854	116,642	20 6	119,380
1855	137,076	13 0	89,082
1856	189,960	12 5	117,906
1857	210,434	14 1	148,158
1858	216,397	15 0	162,162

p to the year 1852 the commerce of New South Wales, as shown he figures representing the imports, was erratic in an especial ee, but with the year in question came a marked expansion in the y's trade, and the volume of imports increased in a single year about two to more than six and a quarter millions, although the ns for the next three years would appear to indicate that the orts of 1853 were due rather to speculative enterprise than to the ssities of commerce. In the following table are given the imports exports of New South Wales from 1851 to 1858, the former year g included for purpose of comparison :—

Year.	Imports.	Exports.
	£	£
1851	1,563,931	1,796,912
1852	1,900,436	4,604,034
1853	6,342,397	4,523,346
1854	5,981,063	4,050,126
1855	4,668,519	2,884,130
1856	5,460,971	3,430,880
1857	6,729,408	4,011,952
1858	6,059,366	4,186,277

The imports comprised mainly manufactured goods and articles of ury, while the exports consisted almost exclusively of raw material

employment, and that house property had fallen 33 per cent.
consequent upon the emigration of people to California.
dated 1849, which dealt with franchise qualifications, showed t
were within the limits of the city of Sydney 288 houses wit
of under £5 per annum; 1,493 with a rental of £5 and un
1,757 with a rental of from £10 to £20; and 4,204 with a
£20 and upwards.

About the beginning of the year 1844 some slight reac
experienced in the trade of the colony, and the depressed
local interests was felt to be reviving. Contemporary write
the new year as a fresh starting-point for renewed enter
confidence; but, unfortunately, the condition of things was i
permanently improved, and the depression shortly afterward
more pronounced than ever. Australia, however, had no ex
experience, and there is little doubt that the local disasters
the back-wash of the wave of depression which rose in Europe.
out the whole of the eastern colonies the greatest distress was
many mercantile houses whose credit had hitherto been undou
who proudly dated their establishment from the foundatio
settlements, were laid prostrate.

Boiling-down, meat-canning, and other devices were resort
order to revive the commerce of the colony from the stagna
lethargy into which it had fallen, yet notwithstanding all e
affairs steadily became gloomier, prices continued seriously t
and speculation was practically at a standstill. It is di
imagine to what depths the colony might have sunk had it
for the discovery of gold in 1851, when the face of everythin
the word of a magician, became instantly changed, althoug
influence of the discoveries was not felt until the following yea

The industries during this period comprised sheep and cattle-
whaling and sealing, coal-mining, horse-breeding, general and da
ing, timber-getting, and gold-mining. Boiling down sheep and
their fat was, of course, only an effort to realise somet
depreciated stock—an expedient which cannot be regarded as
mate industry at all; while the southern whale fisheries wer
into the hands of the Americans. From time to time smal
were sent to collect trepang on the northern coast, and this w
quently exported to China, where it commanded a ready mar
it appears that the industry was not sufficiently remunerative, a
therefore, allowed to fall off. The production of tallow, just
the discovery of gold, was, to all intents and purposes, the
staple industry. In the fall of the year 1847 a local journal
the fact that the production of a yearly output of 10,000 tons
necessitated the slaughtering of 75,000 head of cattle (sufficie
90,000 people for one year, at the proportion of 10 lb. of
week each), and 400,000 sheep (sufficient to feed 40,000 peopl

e manufacturing progress of the colony during this period can irly gauged by the following table, which shows the increase in number of the various industrial establishments from 1829 to :—

Establishments.	1829.	1848.
Distilleries	3	2
Rectifying and compounding establishments	......	2
Breweries	6	21
Sugar-refining works	......	2
Soap works	3	18
Candle factories	3	
Tobacco and snuff factories	......	4
Cloth factories	6	6
Hat-making establishments	2	4
Rope-works	......	4
Tanneries	11	40
Salt-works	2	2
Salting and preserving meat works	......	5
Gas-works	......	1
Potteries	......	7
Glass-works	......	1
Smelting-works	......	1
Iron and brass foundries	......	13

e following mills were also at work :—

Steam-engine corn-mills	4	65
Windmills	16	26
Water-mills	10	43
Horse-mills	8	38

he colony's principal exports at the beginning of the period were l, tallow, oil, skins, coal, bark, and salt beef; and, at the close of the od, gold was added.

Fifth Industrial Period, 1852–1858.

he fifth period of the colony's industrial history extends from year 1852 to 1858, and is properly the period of gold-hunting ghout the eastern Australian colonies, as well as in New Zealand. egins shortly after the separation from the mother colony of the Phillip District, and its formation into a separate province under ame of Victoria, and closes just prior to a subsequent dismember- t, in which originated the northern colony of Queensland. The quiescent. The following are given as the rates in the prominent t and callings :—

Trade or Calling.	1859.	1860.	1861.	18
Males, per day, without board and lodging.				
	s. d.	s. d.	s. d.	s.
Carpenters	9 6	10 6	10 0	10
Blacksmiths	9 6	10 6	10 0	10
Wheelwrights	9 6	10 0	10 6	10
Bricklayers	10 6	10 6	11 0	13
Masons	9 9	11 6	11 9	10
Males, per annum, with board and lodging.				
	£	£	£	£
Farm Labourers	30 to 40	30 to 40	30 to 40	30 t
Shepherds	30 to 35	30 to 35	30 to 35	3
Females, per annum, with board and lodging.				
	£	£	£	£
Cooks	25 to 30	25 to 30	25 to 30	25 t
Housemaids	16 to 18	16 to 25	20 to 25	20 t
Laundresses	20 to 25	25 to 30	25 to 30	30 t
Nursemaids	15 to 18	15 to 20	15 to 20	15 t
General House Servants	20 to 25	18 to 25	20 to 25	2
Farm Servants and Dairy-women	15 to 20	18 to 25	20 to 25	2

The average prices of some of the principal articles of consum for the years 1860, 1861, and 1862, are quoted as follow :—

Article of Consumption.	1860.	1861.	1862.
	s. d.	s. d.	s. d.
Wheat, per bushel	8 0	6 6	7 0
Bread, 1st quality, per lb.	0 3½	0 4	0 2½
Flour, ,, per lb.	0 3½	0 3	0 3
Rice, per lb.	0 5	0 4	2d. to 4d.
Oatmeal, per lb	0 6	0 6	0 5
Tea, per lb.	2 3	2 4	1/6 to 2/6
Coffee, per lb.	1 6	1 6	1/4 to 1/6
Meat, fresh, per lb.	0 4	0 3	0 4
Butter, fresh, per lb.	1 6	1 8	2 3
Cheese, English, per lb.	1 6	1 7	1 6
Potatoes, per cwt.	7 6	7 3	8 0

At the close of the preceding industrial period there were i colony 7,581,762 sheep; but in 1859 the number had declin and capable of only the lightest manual labour, they mostly ck to Sydney, where a large number of unemployed had ogether in 1858, when the rush to the Port Curtis gold- out. Joining the unemployed from the mines of Victoria South Wales, they rushed in thousands to the new field, no ,000 leaving Sydney in the space of a month, while 6,000 other parts of Australia. A few weeks sufficed to show ort Curtis gold-field could not maintain so many, and in the of the year the majority left for Sydney, where they roamed s disappointed and unemployed, until drawn away by the of other rushes.

this period, in consequence of the impossibility of inducing ts to come to the colony from the United Kingdom as and mechanics, and in view of the great dearth of labour in dinary occupations of life, the importation of a useful class of , particularly Germans, was strongly urged in the public prints, s asserted that any number of men from Germany could be l to emigrate from their native land under engagement to l the expenses of their passage out. Many, in fact, were so , under two years' indentures, at £20 per year, binding them- refund £18, the cost of the passage, out of their total earnings. , systematic emigration to New South Wales from a European other than the United Kingdom was never carried into effect omprehensive scale. It is interesting to note that, in order to the construction of a railway, the Government consented, in 1852, to allow 500 railroad labourers to be brought out at the of the immigration fund.

ates of remuneration for ordinary labour were on the increase in the colonies, and many branches of industry were coming to still for lack of men to carry them on. In Adelaide, for , wages were not only daily advancing, but settlers were glad to aborigines of the colony to gather in their crops. In the olony of Victoria, carpenters, wheelwrights, and bricklayers , in 1853, 15s. per day, with board and lodging; carpenters, in ithout board and lodging, 28s. per day, and in the country 22s. 6d.; in town, without board and lodging, 26s. 9d. per day, and in the 25s.; bricklayers, in town and in country, without board and 25s. per day; and smiths and wheelwrights, in town and in , without board and lodging, 22s. 6d. per day. In 1854 the rates ruling were quoted as follow:—Smiths in country, 20s. per day; in country, 22s. 6d.; wheelwrights in country, 24s., and in town, rpenters in country, 23s., and in town, 25s; and bricklayers in , 25s., and in town 30s., without board and lodging in each case. Victoria wages were much higher than in the parent colony, in ence of the continuance of the mining boom and the absorp- nearly all enterprise and all available labour in the one direction getting.

that prevailed at the time, is embodied in the following clause:—'
person may, upon any Land Office day, tender to the Land Age
the district a written application for the conditional purchase o
such lands, not less than 40 acres nor more than 320 acres, at the
of 20s. per acre, and may pay to such Land Agent a deposit of
centum of the purchase-money thereof. And, if no other appli
and deposit for the same land be tendered at the same time
person shall be declared the conditional purchaser thereof at the
aforesaid."

The free selector of any portion of Crown lands had three
credit for the payment of the remainder of his purchase-money. S
he, after that time, be unable or disinclined to make payment, l
was granted him to defer instalments for an indefinite period on
5 per cent. interest per annum on the principal amount rem
unpaid. It was also provided that the purchaser of any area of
from 40 to 320 acres should be entitled to three times the ext
his purchase for grazing ground, so long as it should not be claim
any other free selector. Certain conditions were imposed reg
residence, which came to be more honoured in the breach than
observance.

SEVENTH INDUSTRIAL PERIOD, 1863–1872.

The seventh period in the industrial history of the colony, exte
from the year 1863 to that of 1872, was one when the El I
dreams of the fifties had faded from men's minds, and when the
and industrial system now existing was evolved. Few incidents c
for special comment marked the history of this epoch, during
the most important variations in the conditions of labour arose
adverse seasons, vast areas of the colony having been visite
alternate droughts and floods. The distress and acute suffering
resulted from these truly remarkable vicissitudes of climate wer
great, and the destruction of property was in many instances accom
by loss of life. The colony was not inexperienced either in the
of floods or of droughts, but the record of such disasters durin
period was exceptional.

The year 1862 had been ushered in with a drought, but in Feb
and March heavy rains fell in the west, the south, and the south
Floods ensued in those districts, but a long period of dry w
immediately followed. In the month of September the drought
severe that the crops began to perish, and the farmers were com
to cut young green yields in order to supply fodder to the cattle.
fires raged in many districts. In February, 1863, the drought
up, and in consequence of heavy rains the Hawkesbury rose
above its average height, and floods everywhere prevailed from
hampton in the north to Gippsland in the south. To the floods

led dry weather, which marked the closing months of the year. ar 1864 opened no more auspiciously. The summer proved par- ly dry; farmers petitioned Government to be released from for seed-wheat advanced during the previous year; crops in parts of the interior were totally destroyed by rust and drought, the north by continued rain—for floods were again submerging districts of the colony—and efforts were being made in the polis to provide accommodation for the houseless poor. The which covered a period of six months, extending from February y, caused rivers to overflow their banks, swept bridges away, and yed a vast amount of property. The year 1865 was normal as ds the seasons, but unsettled conditions again prevailed in 1867. is year the floods were attended by loss of life as well as by uction of property; lines of railway were closed in consequence e heavy rains, and public works in some districts were greatly ged. The distress of the settlers who had been "washed out" d so loudly for relief that public meetings were held for the purpose ising subscriptions; the Colonial Secretary and others hastened to inundated districts with succour, and the butchers and bakers ydney sent meat and bread to those who had been rendered tute. Dry weather supervened from October, 1867, to January, l, followed by heavy rains which inundated the valleys of the kesbury and the Hunter. The year 1869 began with a severe ght, and the 13th February was proclaimed by the Government a of humiliation and prayer for rain. The pastoral industry was rely affected, and the whole country suffered. In 1870 floods ailed throughout the colony; traffic was stopped, and much erty destroyed. A flood relief committee was formed, and, not- standing the presence of many unemployed in Sydney, great rts were made to send succour to the "washed out" settlers. The th of November in this year was specially fraught with disaster from ds. The calendar was simply a record of inundations which were eral throughout the colony. About the beginning of the second rter of the following year, damaging rains again visited the coast. ods were reported from Penrith and Windsor, and in April and May Hunter and most of the other coastal rivers overflowed their banks. year 1872 was one of less tense physical conditions.

he alternations of inundation and drought, which marked this period haps more than any other in the history of the colony, had a most eful effect upon industry. Money was very dear; the finances of colony were in anything but a satisfactory condition, and Treasurer r Treasurer made ineffectual attempts to make both ends meet. The seasons, also, had their effect in aggravating the general feeling of ression by discouraging the flow of capital to the soil. During the distress in 1866 the unemployed in Sydney were sorely pressed, and ford relief a number were sent to Haslem's Creek to clear an area of for the purposes of a cemetery. At the close of the year, just after

the report of a Select Committee on the condition of the une
had been published, a rush broke out in the Weddin Mounta
temporarily drew a great number of the workless away from
Towards the end of the period great depression was experie
commercial circles; little enterprise was manifested in the
trades, and property changed hands at a depreciation in value
50 per cent. on the original cost.

The early years of this period were characterised by a large
Chinese, to such a great extent that at one time they forme
4 per cent. of the total population, and their presence in Ne
Wales was for long an important factor in democratic and i
legislation. With the development of the colony, and the in
richness of the finds of the precious metal, these aliens poured
country in ever-increasing volume. In 1856 they numbered onl
five years thereafter they had risen in number to 12,988, o
cent. of the population. In 1861 matters with regard to
immigration reached a crisis. The gold-field opened up at Bur
proved extraordinarily rich; a great rush set in to that place, a
crowds of Chinese flocked to the diggings there. The miners
this influx of Asiatic fossickers with very bad grace, and co
public meeting for the purpose of deciding whether "Burrang
a European or a Chinese territory." They likewise addressed a
to the Assembly complaining of the swamping of the field by th
of Chinese. This agitation against the alien miners resulted in co
riotings; the unfortunate foreigners were ejected from thei
their tents were burned, and they were generally ill-used. The
ment, determined to uphold order at any cost, despatched to t
of the riots, a place called Lambing Flat, a mixed force of arti
with two 12-lb. field-pieces, some men of the 12th Regiment, a
members of the mounted police force. The Premier, Mr.
Cowper, also visited the field and addressed a monster meetin
miners, sympathising with their grievances, but informing them
redress could be obtained until riot and confusion had entirel
When the Premier had returned to Sydney the excitement
ceased; a new rush to a locality named Tipperary Gully lur
6,000 miners from the scene of their former disputes, and the
departed to other fields. Thus ended the first labour conflict
the Europeans and the Chinese, who from that date onwar
Prohibition Act of 1888 became a growing menace to the cha
the settlement of the Australian colonies.

There was a marked decline in the rates of wages during th
particularly so with regard to those paid to mechanics. I
the average daily wages of carpenters ranged from 8s. to
town, without board and lodging; of smiths, wheelwrig
bricklayers, from 9s. to 10s.; and of masons, 10s. In the
and inclusive of board and lodging, the wages of carpenters,
and wheelwrights were quoted at £50 to £80 per annum,

ers and masons from £80 to £100 ; farm labourers, from £28
; shepherds, from £30 to £35 ; female cooks and laundresses,
6 to £30 ; housemaids, from £20 to £26 ; nursemaids, from
£26 ; general house servants, from £20 to £30 ; and farm-
ervants and dairy-women from £18 to £26. In 1865 female
eceived up to £36 per annum, with board and lodging ; and
house servants, from £20 to £26. This showed a decline on the
wages ruling in 1863, when mechanics received from 9s. to 10s.
, and from £65 to £100 per annum ; and farm labourers and
ds from £30 to £35. The wages of female servants were not,
r, very considerably affected. In 1871, workmen in the metro-
nvened meetings to protest against the reduction of wages ;
eless, there were numbers who could not obtain employment.
ges of carpenters, smiths, and wheelwrights were then quoted
ging from 8s. to 9s. per day, and from £50 to £70 per annum ; of
vers, from 8s. to 10s. per day, and from £60 to £80 per annum ;
masons, from 8s. to 9s. per day, and from £60 to £80 per annum.
ges of farm-labourers were quoted as ranging from £26 to £30 ;
ds, from £26 to £35 ; female cooks, at £30 ; housemaids, from
£26 ; laundresses, from £26 to £30 ; nursemaids, from £13 to
nd general house servants and dairy-women from £20 to £26.
erage wages per day or per week, for each year during the
were as follow :—

Calling.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.
Males, per day, without board and lodging.									
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
s	9 0	8 6	8 6	8 6	8 6	8 6	8 0	8 6	8 6
ths	9 6	9 6	9 6	9 6	9 6	9 6	9 6	10 0	8 6
ghts......	9 6	9 6	9 6	9 6	9 6	9 6	8 6	8 3	8 6
rs	10 0	9 6	9 6	9 6	9 6	9 6	8 6	10 6	9 0
....	10 0	10 0	10 0	10 0	10 0	10 0	8 6	9 6	8 6
Males, per week, with board and lodging.									
ourers	13 0	11 6	11 6	11 6	11 6	11 6	12 3	12 9	10 9
s	13 0	13 0	13 0	13 0	13 0	13 0	13 3	12 9	11 9
Females, per week, with board and lodging.									
....	11 0	11 0	12 0	10 0	11 0	11 0	11 3	10 9	11 6
ids	9 0	9 0	9 0	9 0	9 0	10 0	9 0	9 0	9 0
ses	11 0	11 0	9 0	10 0	10 0	12 0	10 9	10 9	10 9
ids........	8 0	8 0	8 0	7 0	7 0	8 0	8 0	8 0	8 0
ervants....	10 0	10 0	9 0	9 0	9 0	11 0	10 0	10 9	9 0
use ser- and dairy-	8 6	8 6	8 6	9 0	9 0	10 0	9 0	9 0	9 0

nsidering the table just given regard must be paid to the fact
though there was a considerable decline in the daily wage received
ed mechanics, the prices of commodities in general use also steadily

fell. The following table gives quotations for some of the pri articles of consumption for a portion of the period :—

Article of consumption.	1863.		1864.		1865.		1866.	
	s.	d.	s.	d.	s.	d.	s.	d.
Wheat, per bushel	6	6	12	0	8	0	6	6
Bread, 1st quality, per lb. ...	0	2½	0	3	0	4	0	4
Flour, ,, per lb. ...	0	2	0	3	0	3	0	3
Rice, per lb.	0	3	0	3	0	3	0	4
Oatmeal, per lb.	0	4	0	4	0	4	0	4
Tea, per lb.	2	0	2	0	2	0	2	6
Coffee, per lb.	1	4	1	4	1	4	1	4
Meat, fresh, per lb.	0	4½	0	4	0	3	0	3
Butter, fresh, per lb.	1	6	1	6	1	9	1	3
Cheese, English, per lb.	1	6	1	6	1	6	1	6
Potatoes, per cwt.	7	0	5	0	8	0	6	0

The stoppage of immigration reduced the demand for resid accommodation, and rents came down to about half the rates rulin years before. Capitalists preferred to place their money on depo the banks, where they obtained high rates of interest, to investing building properties.

In March, 1863, an Intercolonial Conference was held in Melbo at which the colonies of New South Wales, Victoria, South Aust and Tasmania were represented. The questions discussed related t tariff and kindred matters ; intercolonial customs duties, and thei tribution ; transportation from the United Kingdom to the Austr possessions ; a permanent immigration fund, to be provided under Parliament by each colony, upon an equitable basis ; improveme internal rivers in Australia for purposes of navigation and irriga coast lighthouses, and other maritime questions affecting the shi interest ; fortnightly ocean postal communication ; Anglo-Australia China telegraph ; legal questions, including the law of bankrupt patents, of joint stock companies, of probates and letters of admin tion, and a court of appeal for the Australian colonies ; and a un system of weights and measures. These questions subsequently en the attention of the various Australian Parliaments, and result the carrying into effect of much useful and needed legislation.

At the beginning of the period a Select Committee was appoint inquire into and report upon the state of the manufacturing and cultural industries. On the 12th December, 1862, this Comm brought up a report which stated that from the evidence taken i shown that manufactures had not increased during twenty years; many which had flourished in the past were not in existence; an in consequence thousands of youths were wandering about the s in a state of vagrancy, instead of learning some useful trade.

nent is, however, too sweeping to be accepted literally, and is not
rted by any evidence of value.

the early part of the period the banks required as much money
ey could obtain, and were competing for it in the local market
g for twelve months' deposits 6 and 6½ per cent. interest. Besides
anks, private companies were asking for money, for which they
d 7 per cent.; while there was a large amount of New Zealand
rnment debentures bearing 8 per cent. interest thrown on the
et.

ouble was experienced with the flocks and herds in 1862 and in the
wing year. Sheep were infected with catarrh and scab; pleuro-
monia was reported to have attacked the cattle, and pleurisy made
ppearance among the horses.

overnor Young's term of office, which extended from 1861 to 1867,
marked by a certain amount of agitation in regard to railway
ters, but railway construction proceeded slowly, the total mileage
for traffic in 1866 being only 143. Several lines were, however, in
se of construction, and at the end of 1871 the mileage had increased
358. In that year the lines open in Victoria measured 329 miles,
in all Australia, 1,082 miles.

his was the great bushranging epoch in the colony's history, which
morises such unworthy names as those of Frank Gardiner, the
rkes, Dunn, Johnny Gilbert, Ben Hall, Morgan, Power, "Thunder-
t," and O'Malley. The existence of this dangerous bushranging pest
a source of embarrassment to each successive Government, and a
nding challenge to every Ministry that accepted office.

t is unnecessary to refer to the mining, agricultural, pastoral, and
nufacturing statistics of this period, as they will be found in the
cial chapters treating of the development of these industries.

EIGHTH INDUSTRIAL PERIOD, 1872–1893.

The twenty-two years, 1872–93, forming the eighth industrial period,
not call for such lengthened description as former epochs, seeing that
statistics to be found in various parts of this volume illustrate the
tails of the progress made. The preceding period closed somewhat
nely. Population was not being attracted to the colony in any large
mbers; land was not being taken up by selectors, nor was there any
tained effort to develop the resources of the colony. Railway
struction was almost suspended; the expenditure by the Government
public works, either from revenue or from the proceeds of loans, was
all; while little private capital found its way to the country. In
0 the production of gold fell to the lowest point since its discovery,
total output of the year being valued at £931,016; the condition of
iculture gave evidence of little progress, and the land taken up for
lement showed a total of 423,692 acres, or rather less than the

figures for 1862. Under such circumstances the industrial co could not be said to be hopeful, but causes were at work which w affect materially the progress of the country.

The production of gold in 1872 reached the respectable tot £1,643,582, due to the development of the Hill End and Tamb Mines. The copper-mines, which had not been worked before to great extent, were now systematically developed ; and in the same the rich tin deposits of the country received attention. The advanta the colony as a place for settlement was recognised, especially persons in the southern colonies. Purchases of land from the proceeded on an extensive scale, and with increased land sales greater attention to primary industries. Agriculture expanded; cattle-breeding, which had been losing importance since the Land of 1861 came into force, received renewed attention. Nor was sh breeding neglected, as might have been expected, in favour of the industry, for the price of wool was highly satisfactory to the gr especially during the five years ending with 1875. These combi causes made the outlook very bright at the beginning of the period

About the year 1872 public attention was awakened to the nec of pushing on with the construction of railways, roads, and bridg open up the interior of the country, and an expansive public w policy, involving the expenditure of large sums of borrowed money, accordingly initiated. In the year named the expenditure on p works was £560,931 ; in 1873, £722,252 ; and during the next tw years the average yearly expenditure on public works was—

	£
1874-78	1,565,148
1879-83	3,320,988
1884-88	4,114,984
1889-93	2,489,914

During 1872 the hands employed on public works were probabl more than 3,000; in 1874-78 the yearly average fell little short of 8 during the next five years (1879-83) the numbers reached 16,00 1884-88, 20,500 ; and in 1889-93, 12,500. These figures are excl of persons permanently employed in the public departments and o railways.

Coincident with the vigorous construction of public works chiefly on the part of graziers desirous of protecting themselves the incursions of free selectors, there arose a great demand for which was readily responded to by the State, and the public lands bought up with such eagerness that in the five years from 18 1877 the revenue derived from this source increased from £80 to over £3,000,000, and the public exchequer was overfl Wages were high, employment steady, provisions cheap, and nu of men, for the most part young and energetic, were attract the colony by the alluring prospects held out to them, the increment to the population being doubled within a few years.

e with the demand for labour the Government maintained a
immigration policy, and in the ten years which closed with
arly 49,000 persons were assisted to these shores from the
Kingdom, and were readily absorbed in the general population.
kelihood industrial conditions would have improved during this
rithout any lavish expenditure by the Government, but what
able was made certain by the favourable combination of circum-
alluded to.

following table of average wages for each year from 1872 to
quotations are classified as daily or weekly, according to the
modes of payment :—

le or Calling.	1872.		1873.		1874.		1875.		1876.		1877.		1878.		1879.	
Males, per day, without board and lodging.																
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
rs	9	0	10	0	9	0	9	6	10	0	10	8	10	8	10	8
ths	9	0	10	0	11	0	10	3	11	0	11	0	10	0	10	0
ers	9	6	10	0	11	0	11	0	12	0	11	0	11	0	11	0
	9	6	10	0	11	0	11	0	11	0	11	0	10	6	10	6
s	10	0	10	0	11	0	11	0	12	0	11	6	11	6	11	6
	9	0	9	0	9	0	9	6	9	6	9	6	9	6	9	6
kers	9	0	10	0	10	0	10	0	10	0	10	0	10	0	10	0
s and navvies	7	0	7	0	7	0	7	0	7	0	7	0	7	0	8	0
kers (at per 1,000)	...		...		...		...		22	6	22	6	23	9	23	9
Males, per week, with board and lodging.																
oourers	14	0	13	0	14	0	15	0	15	0	15	0	15	0	15	0
ls	14	0	14	0	14	0	15	0	15	0	15	0	14	6	14	6
Females, per week, with board and lodging.																
ids	9	0	10	6	10	6	11	0	11	6	11	6	11	6	11	6
ses	10	6	10	6	13	6	14	0	14	6	14	6	14	6	14	6
ids	7	6	9	0	9	0	10	0	10	6	10	6	10	6	11	6
servants	10	0	10	6	10	6	12	6	14	0	14	0	14	0	14	0
	10	6	13	6	13	6	13	6	16	0	16	0	17	6	18	6

Trade or Calling.	1880.		1881.		1882.		1883.		1884.		1885.		1886.	
Males, per day, without board and lodging.														
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
rs	10	0	10	0	11	0	11	0	11	0	11	0	9	0
ths	10	0	9	6	10	0	10	0	10	0	10	0	9	6
ers	11	0	11	0	12	6	12	6	12	6	12	6	11	0
	10	6	10	6	11	6	11	6	11	6	11	6	11	0
s	11	6	11	6	12	0	12	0	12	0	12	6	11	0
	9	6	9	6	11	0	11	0	11	0	11	0	9	0
kers	9	6	9	6	9	6	9	6	9	6	9	6	10	0
s and navvies	8	0	8	0	8	0	8	0	8	0	8	0	8	0
kers (at per 1,000)	23	9	23	9	23	9	23	9	23	9	23	9	23	9

Trade or Calling.	1880.		1881.		1882.		1883.		1884.		1885.	
Males, per week, with board and lodging.												
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d
Farm labourers	15	0	15	0	17	6	17	6	17	6	17	
Shepherds	14	6	14	6	15	0	15	0	15	0	15	
Females, per week, with board and lodging.												
Housemaids	11	6	11	6	13	0	13	0	13	0	13	
Laundresses	14	6	14	6	17	6	17	6	17	6	17	
Nursemaids	11	6	11	6	11	6	11	6	11	6	11	
General servants	14	0	14	0	15	0	15	0	15	0	15	
Cooks	18	6	18	6	18	6	18	6	18	6	18	

An important factor affecting the industrial conditions duri whole period following 1872, which should not be lost sight of, importation of private capital. The colony, during the greater its history, has been benefited by the introduction of private and in the years prior to 1870 this importation was chiefly in it acceptable form, being accompanied by the owners. The am private money introduced varied somewhat from year to year, b as late as 1873 it did not exceed half a million sterling. In 1874 commenced to flow to the colony largely for investment purpo during the fifteen years which closed with 1890 the extrao amount of forty-four millions sterling was received, £6,228,000 in 1885, and £5,392,000 in the following year. It can well be in that the influx of so large an amount of private money, joined large expenditure by the State, was felt in every branch of in As already pointed out, wages rose 25 per cent. in skilled trac from 40 to 50 per cent. in unskilled trades, and in some years th not a man in the colony willing to work who was unemploye outlay on public works reached a maximum in 1885, when the e ture was £5,242,807, but in 1888 it fell to £2,106,027. This the throwing out of employment of 15,000 men, and to mitig distress consequent on the inability of the community to ab much labour suddenly thrust upon it, the Government starte works, and an expenditure of £387,000 was incurred upon them they were abandoned.

It will be observed, from the narrative just given, that the lar penditure by the State occurred in 1885, the same year as that i the largest amount of private money was brought to New South From 1885 the import of capital fell off year by year unti when it practically ceased, so that the withdrawal of the State fr labour market was not mitigated by the support given by

l. The following is a statement of the average import of private l per annum in five-year periods, commencing with 1874:—

	£
1874–78	1,728,600
1879–83	1,997,200
1884–88	4,039,400
1889–93	1,869,000

e three last years of the fourth period showed—

1891	1,338,000
1892	1,667,000
1893	115,000

ere can be no doubt that during many years the amount of capital, public and private, brought to the colony was much larger than l be profitably absorbed, and no small portion of it was necessarily ted to purposes purely speculative, as evidenced in the unreal value ch some forms of property acquired. There was, however, an evil reater consequence than a temporary inflation of values. It will be lily conceded that the introduction of capital within the limits of rption and the application of it to productive purposes are conducive rue progress, while on the contrary the over-introduction of capital, ever applied, means arrested progress. Of the twenty-two years prising the eighth industrial period, 1885 and 1886 witnessed the st introduction of capital, viz., £11,470,807 in the former, and ,028,952 in the latter year. It is, therefore, not astonishing to find the value of domestic produce exported in those two years when pared with population was less than in any other year in the period er review. The reader who is interested in pursuing this question find ample food for reflection in the part of this work dealing h the export trade.

n spite, however, of the drawbacks just indicated, flowing from an ecessary and at times a wasteful expenditure of public money, and the roduction of private money beyond its requirements, the colony made stantial progress. At no period, except in the five golden years, 3–7, were wages so high, and in no period was the purchasing power oney so great. The tide of improvement had reached its highest l during the years 1882–85; and it began to recede in 1886, when ployment became difficult to obtain and wages began to fall. In 6–87 work in some of the southern district collieries was suspended nearly twelve months by strikes and disputes; in 1888 the coal- ers of the northern district were on strike for several months; in 8 and 1889 the completion of various large public works threw out employment some 12,000 men—no inconsiderable proportion of the killed labour of the country—and large numbers of unemployed congregated in and around Sydney; in 1890 the maritime and oral industries were disturbed by strikes and disputes very hurtful

to the community in general, and to the working classes in
ticular; and in 1892 another disastrous strike occurred, causing
silver mines of Broken Hill to remain idle for fully three months.

Up to the end of 1891 there was little reduction in the nominal
of wages in skilled trades, though for unskilled labour the rate
perienced a decided decline. In 1893 there was a heavy fall all r
and the second half of that year marks the beginning of a new i
trial period under vastly changed conditions, which will be referr
later on :-

Trade or Calling.	1887.		1888.		1889.		1890.		1891.	
Males, per day, without board and lodging.										
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Carpenters	9	6	10	6	11	0	9	6	9	6
Blacksmiths	10	8	9	8	8	6	8	6	9	8
Bricklayers	11	6	10	6	11	0	10	0	10	0
Masons	10	6	10	6	11	0	10	0	10	0
Plasterers	11	0	11	0	10	6	10	6	10	0
Painters	9	0	9	0	9	6	9	6	9	6
Boilermakers	10	2	9	0	10	0	10	0	9	8
Labourers and Navvies	8	0	8	0	8	0	8	0	8	0
Males, per week, with board and lodging.										
Farm labourers	17	8	17	8	15	4	15	4	15	4
Shepherds	15	4	15	4	......		......		.....	
Females, per week, with board and lodging.										
Housemaids	13	6	13	6	14	0	14	0	14	0
Laundresses	18	8	18	8	18	0	18	0	18	0
Nursemaids	11	4	11	4	8	6	8	6	8	6
General servants	16	8	13	6	14	0	14	0	14	0
Cooks	21	0	21	0	25	0	25	0	25	0

NINTH INDUSTRIAL PERIOD.

It is idle to speculate as to what would have been the cou
industrial history had the banking crisis of 1893 not occurred. It
however, be mentioned that wages had shown signs of failing
the suspensions took place. Between the first and second half of
there was a fall of about 10 per cent. in the wages of mechanics,
somewhat greater fall in the wages of unskilled labourers. In
there was no further fall, but employment became more restricted
1895, however, there was a still further drop, the wages of the
averaging for skilled workmen 22 per cent. below the rates of 189
for unskilled labourers about 17½ per cent. During 1896 wa
several trades rose, and since then there have been some f
advances, and generally more regular employment than at any

e the bank crisis. In 1898 employment in the building trades was
tiful, and the wages of masons, bricklayers, and allied trades rose
point which they had not reached since 1889.

During the period under review there has been a stoppage of nearly
forms of speculative activity; on the other hand, there has been
arked extension of agriculture and important mining developments.
m 1891 to 1898 the area under crop was increased by 1,349,286
s, and the output of gold by 187,158 ounces. The following were
average wages for the more important trades:—

Trade or Calling.	1893 (second half) and 1894.		1895.		1896.		1897.	
Males, per day, without board and lodging.								
	s.	d.	s.	d.	s.	d.	s.	d.
Carpenters	9	6	8	0	8	0	8	6
Blacksmiths	8	0	6	8	8	6	9	0
Bricklayers	9	6	8	6	9	0	9	0
Masons	8	6	7	8	9	0	9	0
Plasterers	8	6	7	0	7	0	8	0
Painters	8	0	7	0	7	0	8	0
Boilermakers	9	0	8	0	8	6	10	0
Labourers and Navvies	6	0	6	0	6	0	6	0
Males, per week, with board and lodging.								
Farm labourers	12	6	12	6	12	6	13	6
Females, per week, with board and lodging.								
Housemaids	10	0	10	0	10	0	11	0
Laundresses	14	0	14	0	14	0	15	0
Nursemaids	7	6	7	6	7	6	7	6
General servants	11	6	11	6	11	6	11	6
Cooks	14	0	14	0	14	0	14	0

WAGES IN RELATION TO COST OF LIVING.

For the periods under review in the foregoing pages money wages have
one been dealt with, but it is a matter of much greater importance to
ertain the rate of real wages—that is, the purchasing power of wages
comparison with their nominal value. Such a comparison must
essarily be defective in some respects, since with changing condi-
ns come other forms of labour, and with higher wages greater consump-
n, so that in comparing present times with days long past there is
ager of weighing what is now important against what was formerly of
consequence; notwithstanding this it gives a more exact notion of
e value of wages at different periods than can be obtained in any other
y. It also affords the only true standard by which material conditions
different times can be accurately gauged. In the following table are

The brewing industry has not made much advance since 1886, w an excise of 3d. per gallon was imposed on the local manufactu beer. It is open to question, however, whether the falling off in duction, in comparison with the growing population, is due to this as there is evidence that there is now a lessened demand for all form alcoholic liquors. The invoice value of ale and beer imported, and which duty was paid, during 1897, was £256,030—not a very l amount considering that £171,179 of it was for beer in bottle, wh the colonial breweries are only now attempting to produce on a extensive scale. The following table illustrates the present positi the brewing and bottling industry and its progress during the last years; the figures given for the years 1887–88 to 1890–91, du which period the statistical year did not coincide with the calendar ye represent the quantities on which excise was paid during 1888, 18 1890, and 1891 respectively:—

Year.	Hands Employed.	Manufacture of Ale, Beer, etc.
	No.	gallons.
1887–88	804	9,300,200
1888–89	850	9,515,200
1889–90	826	9,619,600
1890–91	793	10,594,020
1892	745	10,807,200
1893	685	9,753,200
1894	744	9,508,400
1895	848	9,821,840
1896	791	10,177,360
1897	871	10,806,400

The growth of sugar-cane in the northern districts of the colony, and the manufacture of sugar therefrom, have now become important industries, the output in 1897 being 553,066 cwt. of sugar and 1,421,406 gallons of molasses. Although there was a contraction in the area of land devoted to the growth of sugar-cane in the last season, there has been a considerable extension of the cultivation of this crop during the past ten years, the acreage for the year ended March, 1898, being 25,865, of which 12,936 acres were productive, as compared with 8,[illegible] productive acres and 6,907 unproductive acres in 1888. As far back as 1877–8 the number of sugar-mills in the colony was 50, of which [illegible] used steam-power, whilst 26 were worked by cattle, and the number workmen employed was 1,065. These had increased in the year 1[illegible]- to 83 steam-mills and 19 worked by cattle, whilst the number of iployed and the quantity of sugar and molasses turned out had corres- ndingly increased; but since that time the fall in the value of sugar s caused the closing of many of the smaller establishments, and the ne grown has been to an increasing extent sold to the large factories, ich pay to the growers a price but slightly below that given prior to 85. At the present time there are only 19 mills in the colony. lmost everywhere the tendency to concentrate the manufacture of sugar large central establishments is increasing. In the West Indies and ewhere small mills are rapidly disappearing to make room for larger tablishments where business is strictly confined to the industrial process f sugar making, the planters attending solely to the cultivation of the ne. The following shows the particulars of the sugar industry for e last ten years :—

Year.	Sugar Mills.		Horse-power.		Manufacture of—		Hands Employed.
	Worked by Steam.	Otherwise Worked.	Steam.	Other.	Raw Sugar.	Molasses.	
	No.	No.			cwt.	gallons.	No.
1887-88	57	7	2,210	26	450,000	880,000	2,646
1888-89	36	......	1,995	...	225,580	241,088	1,640
1889-90	38	2	3,034	10	380,320	494,145	2,194
1890-91	31	2	*	*	530,660	1,074,080	1,621
1892	24	1	3,594	70	485,780	789,230	1,468
1893	25	3	3,244	16	478,605	1,079,940	1,392
1894	23	2	3,476	*	452,756	1,573,886	1,174
1895	23	1	3,430	4	444,261	1,427,458	1,415
1896	22	1	3,479	7	571,140	2,520,580	1,475
1897	18	1	3,620	7	553,066	1,421,406	1,297

* Not ascertained.

In addition to the 1,297 hands usually employed in 1897, there were 42 others employed at busy periods, comprising altogether 1,739. It is ery possible that casual hands have been included in some of the years hown in the foregoing statement.

There is now only one establishment in the colony for refining raw igar. The quantity of sugar melted during the year 1897 was 864,400 wt., of which 166,295 cwt. were imported, chiefly from Queensland. The

no means be overlooked in a review of the industrial progres
colony, for it is quite possible that what are commonly called pro
times may be marked by a neglect of productive pursuits, and
to uneconomic causes, such as the mortgaging of the resources of
years to feed the present. Something of the kind has taken p
New South Wales, and the existing depression is, in some s
reaction against the industrial conditions of former years. On pa
is given a comparison of the exports of domestic produce over a
of years, reduced to the common level of 1897 prices. From
appears that, judged by the volume of production—and the exp
domestic produce give a fairly reliable index to production—the
point reached during the past twenty-five years was in 1886
that year was so marked by lavish State expenditure and by the
of British capital that little attention was paid at the time
low condition of productive enterprise. After the year named
was a remarkable development in the export of domestic p
brought about by increased attention paid to productive pursu
opening up of the silver-mines, and a fortunate succession of fav
seasons. The year 1891 was the point of highest production, bot
lutely and relatively, and though the following year was marked b
in the values exported, the rates for the years 1893 to 1897 c
very favourably with other years, and it would certainly appe
notwithstanding the reaction against the inflation of land val
prevalent a few years ago, and the succession of bad seasons wh
province is passing through, there is nothing in the circumsta
the colony to warrant the distrust of the future which has prev
certain quarters, and which directly led to the financial scare of 1

EMPLOYMENT AND PRODUCTION.

E population of a country is naturally divided into two broad divi-
sions—breadwinners and dependents. The census returns of New
Wales for 1891 showed on the side of the breadwinners 471,887
ns, of whom 382,385 were males, and 89,502 were females, while the
dents numbered 649,203, comprising 223,285 males and 425,918
es. In addition to these, there were 2,333 males and 531 females
cified as to occupation. The female worker is very rarely the bread-
er of the family, and the number of persons dependent on such is,
fore, not large. On the other hand, not a few of the female workers
breadwinners earn less than is needed for their own support, and
id classification would require that they should be placed in a
on between the breadwinners and dependents; but this is a refine-
which cannot now be attempted. It would, however, be reason-
to set the persons dependent on women against those classed as
winners who are only partially self-supporting, so that the whole
e dependents may without much error be said to be supported by
nale breadwinners. Of the 382,385 of the last-named class there
therefore, 649,203 persons dependent, giving a proportion of 170
ndents to every 100 male breadwinners. The term "dependent" is
ltogether a happy one, seeing that under that designation are
ded married women and others who perform domestic duties, and
erm can only be justified on the ground that for such services no
y-wages are paid.

e figures just given relate to 1891. Since then there has been an
ase of population amounting to 18·85 per cent. to the middle of
, and the census figures have been increased by this percentage to
n the figures for the latter year. Nothing has happened since
to materially alter the proportions of the population coming within
ifferent grades.

Power is not employed to any extent in the industries included i foregoing class, except in boot factories and woollen mills. In factories plant valued at £62,470 is employed, the machinery h a capacity of 300 horse-power; in clothing factories the value of is £5,331; and in woollen mills the plant is valued at £22,42 capacity of the machinery being 201 horse-power.

As a wool-growing country New South Wales is apparently spe adapted for the manufacture of woollen goods, and accordingly industry was one of the earliest organised in the colony. The ende to promote the local manufacture of woollen goods, however, has met with little success. The largest establishments find it n to add to their business the making of slop clothing, by which they have been enabled to carry on at a profit. The machinery in of the mills is not of the best kind, and altogether the industry i appointing.

The following table shows the number of woollen-mills in oper the number of employees, and the quantity of cloth manufactured d each of the last ten years:—

Year.	Woollen-mills.	Hands Employed.			Quantity of Woollen Cloth manufactured.
		Males.	Females.	Total.	
	No.	No.	No.	No.	yards.
1887–88	5	101	71	172	348,000
1888–89	5	117	60	177	241,000
1889–90	5	110	62	172	207,500
1890–91	4	94	61	155	310,000
1892	5	127	58	185	202,088
1893	5	144	59	203	440,500
1894	5	159	62	221	461,000
1895	5	175	67	242	613,500
1896	5	162	70	232	588,015
1897	5	149	61	210	440,177

In 1882 there were eight woollen-mills in operation in the c employing as many as 385 hands. Now, as will be seen from the table, the number of mills has been reduced to five, and the emplo afforded is much less; at the same time, the production of cloth i was only returned at 319,225 yards. It will be observed, h that the quantity of woollen cloth which is stated to have been factured bears no fixed proportion to the hands employed. Th are set down from the manufacturers' own returns, and are what they are worth.

ne persons performing household duties without wages are chiefly s and daughters of breadwinners; the number who cannot be so ribed is approximately 26,400. The relatives and others not per- ming household duties were for the most part aged persons, the nts or grand-parents of the breadwinners. There are, however, e young persons returned under this category, these comprising ghters or wives who cannot be classed as performing domestic duties, who desire not to be so described. The larger portion of the persons endent on charity are living in public institutions.

AGES OF BREADWINNERS AND DEPENDENTS, 1898.

he record of the ages of the workers is interesting chiefly as showing employment of young people. The number of children under 15 rs who are employed is about 14,805, of whom 10,200 are males and 05 females, the majority of each sex being in their fifteenth year. So as can be estimated, there are not more than 1,700 children of 13 rs and under employed in the colony. This is a natural result of compulsory clauses of the Public Instruction Act, which require the ndance, unless with valid excuse, of all children from 6 to 14 years a term of 70 days in each half-year.

eference has already been made to the number of dependents com- ed with the breadwinners. Still more interesting is the grouping of dependents and breadwinners under ages. The following figures r to males only :—

Age Groups.	Bread-winners.	Dependents.	Total.	Dependents per thousand persons in each age group.
Under 15 years	10,200	247,710	257,910	960
15 years and under 20	56,940	6,425	63,365	101
20 „ „ „ 25	66,940	865	67,805	13
25 „ „ „ 45	211,555	3,390	214,945	17
45 „ „ „ 65	89,640	2,610	92,250	28
65 years and upwards	16,660	2,900	19,560	148
Total............	451,935	263,900	715,835	369

The age group in which the least number of dependents is found is that m 20 to 25, where the proportion per thousand is only 13. The propor- n increases to 17 from 25 to 45, to 28 from 45 to 65, and to 148 per ousand persons over 65 years of age. This gradation agrees some- at with the ascertained rate of sickness referred to in the chapter ating to Vital Statistics, and it is a very probable assumption that dependency of males, when not caused by criminality, is due to ditions of health. With females it is otherwise, as will be seen from following table. Under the category of dependents are included wives and daughters performing domestic duties, and chil naturally dependent ages ; and, as the table shows, the propo dependents decreases with the progressive ages. The expla this will be found in the fact that the number of widows and d wives is largest at the older ages, while the number of single compelled to rely entirely on their own earnings is also greater:—

Age Groups.	Bread-winners.	Dependents.	Total.	Dependents per thousand persons in each age group.
Under 15 years............	4,605	251,915	256,520	982
15 years and under 20...	27,990	37,140	65,130	570
20 „ „ „ 25...	25,300	38,495	63,795	603
25 „ „ „ 45..	32,120	126,645	158,765	798
45 „ „ „ 65...	13,830	48,025	61,855	776
65 years and upwards...	3,810	10,090	13,900	726
Total..............	107,655	512,310	619,965	826

The number of women following gainful pursuits is about 10 and of these 103,050 are of the age of 15 years and upwards. Th number of women of these ages is 363,445 ; so that 28·35 per c women over 15 years of age are breadwinners. If these figu compared with the proportions obtaining in other countries, the be found to be very small, and must certainly be looked u evidence of the superior lot of the Australian women. In most Eu countries even the married women are compelled to work for such as they can procure, in order to assist in the support of their fa but fortunately the necessity for such labour is not yet general i colony.

Amongst women there is a marked absence of combination for purposes, and to this must be attributed most of the evils which a women's industrial work. In some trades women are fairly well but in others the current pay for a reasonable day's work is far the sum actually required to maintain a respectable life, so that w who have no assistance from relatives are sometimes compelled to astonishing sacrifices to enable them to live at all. This undue low of wages, as already pointed out, is indirectly due to want of combin but is also greatly influenced by the competition of other women, d wives, who are not solely dependent upon their own earnings for su and who, therefore, are in a position to undersell their less fortu situated sisters.

Occupations of the People, 1898.

The occupations of the inhabitants of the colony were ascertai the census of 1891, and were classified on a uniform system adop the Census Conference held at Hobart prior to the enumeration.

' classification adopted by the Australasian colonies at the ənsus was based on the English classification of 1881, which unscientific and unsatisfactory.

ady explained, the population is divided into two great -breadwinners and dependents. The former are arranged in ıl classes of primary producers and distributors, and these their various orders and sub-orders. Dividing the population ven classes, the number falling under each class in 1898, on f the proportions ascertained in 1891, would be as follows:—

Occupation.	Persons.	Males.	Females.
fessional—Embracing all persons, not other-se classed, mainly engaged in the Governınt and defence of the country, and in tisfying the intellectual, moral, and social ınts of its inhabitants	36,970	24,925	12,045
nestic—Embracing all persons engaged in e supply of board and lodging, and in ndering personal services for which remunetion is usually paid	65,115	20,870	44,245
nmercial—Embracing all persons directly nnected with the hire, sale, transfer, distri-tion, storage, and security of property and terials, and with the transport of persons goods, or engaged in effecting communition	102,255	96,075	6,180
ustrial—Embracing all persons not other-se classed, who are principally engaged in rious works of utility, or in specialities nnected with the manufacture, construc-n, modification, or alteration of materials as to render them more available for the rious uses of man, but excluding, as far as ssible, all who are mainly or solely in the vice of commercial interchange	165,570	144,960	20,610
icultural, pastoral, mineral, and other imary producers—Embracing all persons inly engaged in the cultivation or acquisi-n of food products, and in obtaining other w materials from natural sources	177,495	159,445	18,050
finite—Embracing all persons who derive omes from services rendered, but the ection of which services cannot be exactly termined	12,185	5,660	6,525
endents—Embracing all persons dependent on relatives or natural guardians, including ves, children, and relatives not otherwise gaged in pursuits for which remuneration paid, and all persons depending upon pri-e charity, or whose support is a burthen the public revenue	776,210	263,900	512,310

The number of persons employed in the various timber di
saw-mills, etc., increased at a good rate from 1887 to 1892, b
the latter year has fallen off owing to the stagnation in the buildi
although the foundation of an export trade in timber has latte
the mills in some parts of the colony going to their full capacit
establishments in 1887–88 numbered 322, employing a total nu
3,254 persons, while in 1897 there were 303 mills, and the nu
hands employed was 3,060. The capacity of plant in the la
was 5,377 horse-power, and its value about £226,075; the qu
timber sawn was estimated at 175,168,000 superficial feet 1 in
The number of saw-mills and hands employed and the outpu
the past ten years were:—

Year.	Saw-mills.	Hands employed.	Quantity of Timber sawn.
	No.	No.	1,000 sup. feet.
1887–88	322	3,254	125,000
1888–89	317	3,616	185,000
1889–90	325	3,578	185,021
1890–91	346	3,788	201,505
1892	288	4,573	229,696
1893	283	3,266	196,114
1894	299	3,257	173,088
1895	315	3,402	180,000
1896	326	3,187	169,600
1897	303	3,062	175,168

The industry of brickmaking has declined in importance,
employs just one-half the hands of ten years ago. This is d
suspension of large public works, and to the lessened activity o
builders. The following is a statement of the hands employed
output for the last ten years:—

Year.	Hands employed.	Bricks made.	Year.	Hands employed.	Br
	No.	thousands.		No.	th
1887–88	2,230	214,199	1893	1,357	1
1888–89	2,124	219,795	1894	1,242	
1889–90	1,874	187,769	1895	1,211	
1890–91	2,018	184,862	1896	1,295	1
1892	1,504	115,293	1897	1,166	1

LIGHT AND HEAT.

The hands employed in establishments connected with ligh
heating showed a steady increase until 1892, but since that
introduction of labour-saving machinery in gas-works and t

of the electric light for gas in different places has been responsible eduction in the number of hands employed. The following table the number of hands employed during the last ten years :—

Year.	Hands.	Year.	Hands.
1887-88	798	1893	979
1888-89	836	1894	859
1889-90	855	1895	900
1890-91	976	1896	859
1892	1,221	1897	938

e condition of employment in the various industries grouped in this during 1897 was as follows :—

escription of Works.	Number of Establishments.	Average number of Hands employed.						Machinery and Plant.	
		Managers and Overseers.	Clerks, &c.	Engine-drivers, &c.	Workers in Factory, Mill, &c.	Carters, Messengers, &c.	Total.	Horse-power.	Value.
									£
	7	13	4	9	154	2	182	183	23,370
c light	26	28	1	54	32	3	118	2,404	102,694
	30	39	27	35	488	49	638	627	632,279
Total	63	80	32	98	674	54	938	3,214	758,343

e majority of the hands, as will be seen, found employment in works, of which there were 30 in operation during the year 7, employing 638 hands. The quantity of gas manufactured was 4,691,000 cubic feet, to produce which about 172,000 tons of coal used, giving an average of about 10,600 feet of gas for each ton of . The quantity of gas made during the past ten years was :—

Year.	Thousand cubic feet of gas.	Year.	Thousand cubic feet of gas.
1887-88	1,361,408	1893	1,805,812
1888-89	1,379,150	1894	1,772,557
1889-90	1,434,942	1895	1,822,243
1890-91	1,512,232	1896	1,816,613
1892	1,670,944	1897	1,824,691

he rate charged to consumers varies in different country localities ween 3s. 4d. per 1,000 feet in Bathurst and 15s. in Broken Hill Deniliquin, while the prices for street lighting range from

FURNITURE.

The furniture and allied trades now employ about 170 hands le they did eight years ago. The numbers for the last ten years w

Year.	Hands employed.	Year.	Hands employ
1887-88	1,323	1893	687
1888-89	1,477	1894	794
1889-90	1,424	1895	772
1890-91	1,234	1896	1,1
1892	1,048	1897	1,310

The decline in the number of hands was continuous from 18 1893, but the figures for 1894 showed a satisfactory increase, and labour conditions were greatly improved in 1896 and 1897. Inc with the 960 hands engaged in making furniture are 361 Ch Formerly the number of these aliens occupied in the cabinet-m industry was larger, but the Chinese Restriction Act has effe prevented the recruiting of hands for the shops employing them, a putting a premium on their labour has enabled them, where remained in the employment of the furniture factories, to obtain hi wages. Of late years there has been a marked tendency for the Ch workmen to abandon their old employment, and combine in three fours for the purpose of establishing co-operative shops.

Description of Works.	Number of Establishments.	Average number of Hands employed.						Machinery a Plant.	
		Managers and Overseers.	Clerks, &c.	Engine-drivers, &c.	Workers in Factory, Mill, &c.	Carters, Messengers, &c.	Total.	Horse-power.	Value.
									£
Bedding, Flock, and Upholstery	16	20	9	4	227	11	271	112	7,
Furniture	61	95	7	8	842	7	*960	131	21,
Picture Frames	5	5	1	..	44	..	50	5	2
Window Blinds	3	5	1	..	22	1	29	..	1
Total	85	125	18	12	1,135	19	*1,310	248	[illegible]

* Including 1 man regularly employed at his own home.

MISCELLANEOUS INDUSTRIES.

Besides the industries already dealt with, there are numerous not readily falling under any of the categories into which the ma tories have been grouped. These have been placed together i

STEAM POWER.

power used in the colony for manufacturing, transporting, and urposes is equivalent to 222,500 horse-power, or 168 horse-power ry thousand persons, a rate comparing not unfavourably with ountries, as will be seen from the subjoined statement, computed ulhall's *Dictionary of Statistics* :—

Country.	Horse-power employed.	Per 1,000 of the population.
	thousands.	
United Kingdom	9,200	250
France	4,520	110
Germany	6,200	130
Russia...........................	2,240	30
Austria	2,150	50
Italy	830	30
Spain	740	40
Belgium	810	140
Holland	340	80
United States...............	14,400	240
New South Wales	222	168

e services for which the power is used are shown in the following from which it will be seen that land and water transport absorb 00 horse-power, or over 48 per cent. of the total horse-power yed. The information with regard to transport and manufactories rly exact, but is only approximate for the other industries :—

Industries employing power.	Horse-power.
Transport, Land	66,000
Transport, Water	41,200
Manufactories, etc.......................................	34,200
Agricultural, Pastoral, and Dairy Farming ...	38,100
Mining	27,700
Miscellaneous	15,300
Total	222,500

w South Wales has few running streams so placed as to be available he purpose of driving machinery for manufacturing purposes. By he largest portion of the power used is, therefore, derived from steam ; me instances, chiefly in the metropolis, gas is employed ; the other r used is in a few cases hydraulic or electric, while the balance prises machinery worked by horses and cattle. In the table given

This table includes, under "Other Industries," one of each following :—Bee hives, explosives, horse and cattle medicines, descent gas-light mantles, lamps, leather belting, revolving (wood), rubber goods, sewing machines, sheep-shearing machines, pipes, trunks (iron), and umbrellas. These have been combined in that particulars of the business of individual firms may not be

Tallow being one of the staple products of the country, the ture of soap and candles, as might be expected, is firmly established. quantity of toilet and fancy soap made, is, however, as yet but small, in quality it is scarcely equal to that imported at lower prices. Com soap of local make is cheaper than the imported article, and being much better, it usually commands the local market. The quantity in 1887-88 was 190,060 cwt., as compared with 187,142 cwt. in The quantity of candles manufactured was 2,442,960 lb. in 1887 and 2,368,175 lb. in 1897, and the supply, including imports, 6,834,192 lb. and 4,895,971 lb. respectively. The appended table the condition of the industry during the past ten years; the seems to have fallen off since 1895. The quantities stated in the are those returned by the manufacturers, and are given for what they worth, but it is believed that the information for years previous to is not quite reliable.

Year.	Factories.	Hands employed.	Quantities manufactured.	
			Soap.	Candles.
	No.	No.	cwt.	lb.
1887-88	52	367	190,060	2,442,960
1888-89	59	397	198,880	2,796,700
1889-90	30	250	164,800	2,388,440
1890-91	27	194	143,520	1,545,920
1892	21	257	110,360	3,304,130
1893	51	411	180,576	3,510,155
1894	49	467	204,623	4,785,109
1895	50	476	299,356	4,632,730
1896	43	379	150,373	3,734,050
1897	40	310	187,142	2,368,175

The use of tobacco and cigarettes of local manufacture has, very large extent, superseded that of the imported articles. The of cigars made in the colony is, on the other hand, very small pared with the total quantity consumed. In 1887–88 there were af used in the local manufacture of cigarettes, while in 1897 the ntity had increased to 189,007 lb. The weight of each description of cco used in the colony during 1897 amounted to :—

Description.	Imported Manufactured.	Made in the Colony.	Total.
	lb.	lb.	lb.
Tobacco	924,442	1,902,284	2,826,726
Cigars	188,566	14,761	203,327
Cigarettes	81,500	189,007	270,507

A large amount of imported leaf is used in the manufacture of tobacco the colony, the proportion during 1897 being 876,231 lb. of imported f, chiefly American, to 1,229,821 lb. of New South Wales leaf. The antity of each kind of tobacco made in the colony, as well as the ight of leaf used in the manufacture, will be found in the following ble. The quantity of leaf given does not include stalks and stems, hich are taken out in the process of manufacture. As ingredients her than tobacco leaf are known to be used in the making of tobacco, is probable that the figures showing the quantity of locally-grown leaf sed are too high. The proportion of leaf not used would be about 5 per cent. of the total weight.

Year.	* Tobacco Leaf used.		Quantity manufactured.		
	New South Wales Leaf.	Imported Leaf.	Tobacco.	Cigars.	Cigarettes.
	lb.	lb.	lb.	lb.	lb.
1888	1,463,815	610,485	2,062,380	3,624	8,296
1889	1,440,244	545,743	1,971,394	5,393	9,200
1890	1,345,620	569,420	1,892,592	4,120	18,328
1891	1,403,240	639,148	1,982,991	3,412	55,985
1892	1,429,136	617,608	1,964,624	5,128	76,992
1893	1,284,582	597,482	1,776,560	480	105,024
1894	1,312,575	540,009	1,732,496	5,117	114,971
1895	1,334,924	636,287	1,833,744	1,024	136,443
1896	1,351,920	691,769	1,857,616	16,553	169,520
1897	1,229,821	876,231	1,902,284	14,761	189,007

* Stalks and fibre of leaf removed.

GOVERNMENT EMPLOYEES.

The Government of the colony is a very considerable factor in the labour market, as, in the middle of 1898, it had in its pay no less than 30,930 persons, excluding those temporarily engaged, and all persons

The value of wool washed has been omitted from the total und heading of value of articles produced and increased value to ma treated; so also has the value of repairs effected in Government shops and docks.

It is not possible to give like information to what is shown i foregoing table in regard to the year 1897; but the total value duction, apart from the materials used, may be set down at £8,07 and of this amount wages represent £4,618,900.

The value of the production of the manufacturing industry ha estimated for 1880 and some succeeding years, and is shown in tl lowing table. The figures are practically on the same basis as the 1892, the details of which are given above.

Year.	Value of Production.
	£
1880	4,457,700
1885	6,296,000
1890	7,615,000
1892	7,798,786
1894	6,880,200
1895	7,005,800
1896	7,963,500
1897	8,078,900

The decline in the total value shown in some years is due to the f the prices of products, and not to a decrease in the output. The hi point was reached in 1897, with £8,078,900. This value w excess of that of 1892 by £280,000, but had the 1892 prices prev in 1897 the increase would have been £1,653,000.

The employment and production alluded to in the preceding refer to establishments classed for statistical purposes as manufact Besides the 51,439 hands accounted for in the tables, there are actually engaged in manufacturing processes who are not incl These comprise persons working on their own account at home, establishments too small to be properly designated as manufactories the foregoing pages a manufactory has been considered to be an esta ment using steam, or, when steam is not used, where four or more are usually employed. It is estimated that there are 5,348 mal 10,963 females who are thus excluded from classification. The comprise tailors and shoemakers working in their own homes companies of less than four; and wheelwrights, blacksmiths, saddle other workers of the same type, whose establishments are pr repairing shops, such as are found in every village of the colo females are mainly seamstresses, milliners, and dressmakers;

umbers it will be seen that the women working outside the s are a far more important body than the hands employed those establishments.

total number of persons engaged in the various manufacturing es may, therefore, be set down at 67,750, and the value of their ion at £8,872,800, which includes £793,900, the value of the f the hands not included in the returns of factories. These are res which will be quoted in the remaining tables of this chapter.

IMPORTATION OF LABOUR.

the cessation of assisted immigration by the State there has ery little labour imported by the capitalists and manufacturers colony; in fact, almost all the artisans and labourers who have here within the last few years have been those who have left er Australasian colonies in the hope of improving their position South Wales. The question of the importation of labour has n largely dealt with by legislation in this colony. The chief ent on the subject is the Agreements Validating Act, 39 Vic. , which provides that agreements made in any place beyond the for a period of service not exceeding two years shall be as ; and effectual as though they had been entered into within the provided that the contract or agreement shall have been made scribed to in the presence of some officer duly authorised in that by the Governor and Executive Council of New South Wales.

WAGES.

New South Wales, as in most other Australian colonies, the ettlement of the country created a demand for labour of all which could not be satisfied except by a constant accession of rs from other countries. This demand, which was continuous ny years, resulted in the establishment of a rate of wages much than is ordinarily found in older lands. During 1892, however, e depression in trade there came a partial reduction in wages, 1893 and the two following years this became general. Appended tement of the average weekly wages paid in various trades during The average rates of representative trades from the year o the present time will be found in the preceding chapter with the industrial history of the colony. In the numerous es in which work is done and paid for as piecework, weekly f wages have been calculated on the assumption that a week is o forty-eight hours' work, and the rates quoted show, therefore, ount of wages which would be earned by workmen doing a full work.

Occupation.	Maxi-mum.	Mini-mum.	Occupation.	Maxi-mum.	M
I.—Persons engaged in treating Raw Material, the Product of Pastoral Pursuits					
Boiling-down.					
	£ s. d.	£ s. d.		£ s. d.	£
Foremen	2 10 0	2 0 0	Tallowmen	2 0 0	1
Offal and bone men	2 5 0	1 5 0	Oilmakers	2 10 0	1
Bone-dust makers	2 0 0	1 10 0	Glue makers	2 10 0	1
Tanneries.					
Foremen	4 10 0	2 10 0	Tanners	2 5 0	1
Fleshers	2 5 0	1 10 0	Rollermen	2 10 0	1
Curriers	2 16 0	1 10 0	Yardmen	2 5 0	1
Picklers	2 5 0	1 10 0	Limemen	2 0 0	1
Beamsmen	2 15 0	1 10 0			
Wool-washing.					
Foremen	5 0 0	2 10 0	Wooldriers	2 0 0	1
Woolsorters	2 5 0	1 10 0	Woolsoakers	2 0 0	1
Woolpullers	2 5 0	1 10 0	Skinmen	1 16 0	1
Woolwashers	2 5 0	1 10 0	Bearers and Drivers	1 16 0	1
Woolpackers	2 10 0	1 15 0			
II.—Persons engaged in Trades connected with Food and Drink, or the preparation the					
Aërated Waters.					
Foremen	5 0 0	2 0 0	Labellers	0 18 0	0
Makers	4 0 0	2 0 0	Carters	3 0 0	1
Packers	2 5 0	1 7 6	Cart-boys	0 18 0	0
Bottlers	2 10 0	1 0 0	General hands— Males	2 0 0	0
Washers	1 15 0	0 15 0	,, Females	0 15 0	0
Wirers and corkers	1 15 0	0 15 0	Boys	0 16 0	0
Bread, Biscuits, and Pastry.					
Foremen	4 0 0	2 10 0	Pastry cooks	2 15 0	1
Bakers (bread)	3 2 6	1 7 6	,, apprentices	1 0 0	0
,, assistants	1 0 0	0 15 0	Packers - Males	0 15 0	0
,, apprentices	1 5 0	0 7 6	Carters	2 10 0	1
Jobbers	1 3 to 1/6 per hour.		Engineers, carpenters, blacksmiths, &c.	3 0 0	[illegible]
Biscuit-bakers	3 0 0	1 5 0			
Brakesmen	2 0 0	0 18 0	Forewomen	1 0 0	
General hands	2 0 0	0 10 0	Packers – Females	0 15 0	
Machine hands	0 18 0	0 15 0	Labelling and cleaning tins	0 12 0	[illegible]
,, boys	0 10 0	0 7 0			
Breweries.					
Foremen	4 0 0	2 10 0	Coopers, carpenters, wheelwrights, &c.	3 0 0	1
Topmen	2 10 0	1 10 0	Coopers, boys	1 0 0	0
Cellarmen	2 10 0	1 10 0	Packers	2 10 0	0
Cask-washers	2 0 0	1 0 0	Storemen	2 15 0	1
Brewery hands	2 15 0	2 0 0	Draymen	2 15 0	1
General hands	2 0 0	1 0 0	Engineers and firemen	4 5 0	1
Bottlers	2 10 0	1 0 0	Boys	0 18 0	0
Butter Factories.					
Foremen or managers	4 0 0	2 5 0	Butter-makers	2 5 0	1
Milk-testing experts	2 10 0	1 0 0	Assistants	1 10 0	0
Coffee, Cocoa, Rice, Spices, etc.					
Foremen	4 10 0		Storemen	3 0 0	2
Millers	3 5 0	1 2 6	Tinsmiths	2 15 0	1
Coffee and cocoa hands	4 0 0	1 17 6	,, improvers	1 5 0	0
Jelly-makers	4 0 0	1 17 6	Boxmakers, printers, carters, cellarmen	2 10 0	1
Boys	0 18 0	0 6 0	Forewomen	1 0 0	
Packers and labellers	2 10 0	0 12 0	Packers Females	0 15 0	0
,, boys	0 17 0	0 8 0			

ersons engaged in Trades connected with Food and Drink, or the preparation thereof—*continued*.

upation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
			Condiments.		
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
	4 0 0	2 10 0	Bottle-washers, boys	0 10 0	0 6 0
and journeymen.	3 0 0	1 10 0	General hands, girls, and		
ys	0 8 0	0 4 0	women	0 10 0	0 4 0
			Confectionery.		
	4 0 0	....	Assistants and improvers	1 10 0	0 7 0
rs and pan men	2 14 0	0 17 6	Storemen, carpenters,		
improvers	1 10 0	0 9 0	printers, yardmen, &c.	2 12 6	1 10 0
boys	0 9 0	0 7 0	Forewomen	1 0 0	....
es	1 10 0	0 17 6	Confectioners ......Females	1 10 0	....
	2 18 6	1 17 6	,, assistants ,,	0 12 0	0 7 0
ns	0 9 0	0 6 0	General hands ,,	0 9 0	0 5 0
nfectioners	3 0 0	1 10 0	Packers and wrappers ,,	0 15 0	0 5 0
			Creameries.		
	2 10 0	1 10 0	Engineers	2 5 0	1 5 0
			Flour.		
	6 0 0	1 10 0	Packers, boys	1 0 0	0 16 0
iors	2 5 0	0 15 0	Purifier men	2 0 0	1 10 0
	2 5 0	2 0 0	Mixers	2 5 0	1 5 0
	2 0 0	1 16 0	General hands, yardmen, &c.	1 16 0	1 0 0
	2 0 0	1 16 0	Engineers and firemen	3 15 0	1 5 0
and oilmen	2 0 0	1 16 0	Boys	0 15 0	0 10 0
	2 0 0	1 0 0			
			Ice and Refrigerating.		
	4 15 0	2 5 0	Canwashers	1 10 0	1 5 0
en	3 0 0	2 0 0	Tinsmiths and plumbers	3 3 0	2 2 0
	0 18 0	0 10 0	Engineers and firemen	2 10 0	2 5 0
			Jam and Fruit Canning.		
	3 10 0	1 15 0	Case-makers	2 0 0	1 5 0
	2 10 0	1 10 0	Engineers	2 5 0	1 12 6
and solderers	2 8 0	1 10 0	Boys	0 12 0	0 6 0
boys	0 17 6	0 5 0	Fruit-preparers	0 12 0	0 6 0
	1 7 6	0 5 0	Packers............Females	0 16 0	0 10 0
	2 0 0	0 10 0	Labellers ,,	0 12 6	0 9 0
			Meat Preserving and Small Goods.		
	4 0 0	....	Labourers, boys	0 18 0	0 9 0
and extract-			Tinsmiths	3 0 0	1 2 6
	3 10 0	3 0 0	Coopers	2 5 0	2 0 0
kers	2 15 0	2 0 0	Carpenters	3 0 0	2 14 0
	2 15 0	2 0 0	Engineers	3 0 0	2 0 0
en	3 10 0	2 0 0	Fitters	3 0 0	2 2 0
	3 0 0	1 2 6	Smallgoods men	2 10 0	1 10 0
	2 10 0	1 0 0			
			Oatmeal, Self-raising Flour, and Baking Powder.		
	3 0 0	2 15 0	Packers, weighers, and label-		
d packers	2 10 0	1 0 0	lers ..Females	1 3 0	0 7 0
	0 10 0	0 7 0	Girls	0 10 0	0 7 0
en	2 0 0	1 0 0	Paper-bag makers ..Females	0 16 0	0 10 0
			Tinsmiths and carpenters	2 0 0	1 0 0

II.—Persons engaged in Trades connected with Food and Drink or the Preparation thereof—*continued.*

Sugar Mills.

Occupation.	Maxi-mum.	Mini-mum.	Occupation.	Maxi-mum.	Mini-mum.
	£ s. d.	£ s. d.		£ s. d.	£
Foremen mechanics	3 12 0	3 6 0	Pan-boilers' apprentices	1 10 0	0
Engineers and fitters	3 6 0	3 0 0	Foremen bag-makers	3 0 0	
Mechanics	2 14 0	....	Bag-sewers, boys	0 19 0	0
Tinsmiths	2 10 0	1 10 0	Sack-repairers	2 10 0	1
Mechanics' apprentices	1 10 0	0 5 0	Labourers	2 3 0	2
Pan-boilers	4 0 0	2 5 0			

Tea Packing and Blending.

Occupation.	Maxi-mum.	Mini-mum.	Occupation.	Maxi-mum.	Mini-mum.
Foremen	3 10 0	2 5 0	Forewomen	1 4 0	1
Blenders	3 12 0	1 7 6	Packers ....Females	1 0 0	0
Packers	2 10 0	0 10 0	Labellers „	0 15 0	0
Labellers	0 15 0	0 5 0	Bag-makers and blockers ..	0 12 0	0 7
Case-makers	2 5 0	1 16 0			

Vinegar Works.

Occupation.	Maxi-mum.	Mini-mum.	Occupation.	Maxi-mum.	Mini-mum.
Manufacturers	3 0 0	....	Bottlers and labellers	1 10 0	0

III.—Persons engaged in the Manufacture of Clothing and Textile Fabrics.

Boots and Shoes.

Occupation.	Maxi-mum.	Mini-mum.	Occupation.	Maxi-mum.	Mini-mum.
Foremen	4 5 0	2 0 0	Channel-closers ....Males	1 5 0	0
Machine operators ....Males	3 15 0	1 2 6	Skivers „	1 5 0	1
Clickers „	3 2 6	1 5 0	Eyeletters „	1 5 0	0
„ improvers and assistants .. „	1 2 6	0 7 0	Brushers, sockers, dressers, scourers, &c. „	0 17 0	0
„ apprentices .. „	0 17 6	0 9 6	Repairers „	2 14 0	1
Makers „	4 0 0	1 0 0	Sole-sewers „	2 10 0	1
„ improvers „	1 5 0	0 5 0	Packers „	1 15 0	0
„ apprentices „	0 15 0	0 8 0	Boys	0 12 0	0 4
Finishers „	2 10 0	0 12 0	Engineers, storemen, carters, &c.	4 0 0	1
„ improvers and assistants .. „	0 15 0	0 10 0	Forewomen	2 0 0	1
„ apprentices .. „	0 15 0	0 11 0	Machinists ....Females	1 10 0	0
			„ apprentices „	0 12 0	0 4
Rough-stuff cutters and pressmen „	3 10 0	0 17 6	Fitters „	1 7 6	0 7
Rough-stuff cutters improvers „	1 0 0	0 10 0	„ apprentices.. „	0 7 0	0 4
Trimmers „	2 10 0	1 10 0	Tiers-off and bench hands „	0 9 0	0 3
Edge-setters, featherers, and breasters „	2 0 0	0 16 0	Trimmers, sockers, &c. „	0 15 0	0 5

Clothing Factories—Slops.

Occupation.	Maxi-mum.	Mini-mum.	Occupation.	Maxi-mum.	Mini-mum.
Foremen	5 0 0	2 0 0	Vest-hands ....Males	2 4 0	1 1
Cutters ....Males	5 0 0	1 5 0	„ ....Females	1 10 0	0 5
„ assistants and improvers „	1 5 0	0 7 6	Apprentices	0 15 0	0 2
Pressers „	3 10 0	1 5 0	Forewomen	3 0 0	1
„ apprentices and assistants „	1 0 0	0 9 0	Slop trousers machinists ....Females	1 10 0	0 6
Seam pressers „	1 10 0	0 5 0	Slop trousers finishers „	1 10 0	0
Trimmers „	2 15 0	0 10 0	Button-hole Machinists „	1 5 0	0 6
Examiners „	2 17 6	0 14 0	Button-hole finishers „	1 2 6	0
Folders and brushers .. „	2 16 0	0 15 0	Coat machinists .... „	1 2 6	0
Engineers and mechanics, &c.	3 0 0	1 2 6	„ finishers .... „	1 2 0	0
Errand boys and messengers	0 17 6	0 3 6	Vest machinists .... „	1 0 0	
Machinists ....Males	3 10 0	1 2 6	„ finishers .... „	0 12 0	
Coat-hands „	3 10 0	2 0 0	„ apprentices .. „	0 7 0	
„ ....Females	1 15 0	0 7 6			
Trousers hands „	1 12 6	0 10 0			

ccupation.	Maxi-mum.	Mini-mum.	Occupation.	Maxi-mum.	Mini-mum.
ERSONS ENGAGED IN THE MANUFACTURE OF CLOTHING AND TEXTILE FABRICS—*continued.*					
Clothing Factories—Order Tailoring.					
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
....	6 0 0	3 0 0	Vest hands ....Females	1 10 0	0 7 6
..............Males	9 0 0	2 0 0	,, improvers .... ,,	0 17 0	0 5 0
ls.......... ,,	3 10 0	2 0 0	,, apprentices.... ,,	0 12 6	0 2 6
rovers........ ,,	1 5 0	0 10 0	Trousers-makers.... ,,	1 10 0	0 15 0
rentices ...... ,,	1 10 0	0 2 6	,, improvers.. ,,	0 14 0	0 10 0
ers .... ,,	2 6 0	1 5 0	,, apprentices ,,	0 5 6	0 2 6
makers ...... ,,	2 15 0	1 5 0	Machinists .... ,,	1 10 0	0 7 6
.... ,,	3 5 0	1 0 0	,, apprentices ,,	0 10 0	0 2 6
.... ,,	2 5 0	0 17 6	Skirt-makers ...... ,,	1 9 0	0 14 0
ls ....Females	2 0 0	0 15 0	,, improvers and apprentices.. ,,	0 7 6	0 2 6
rovers...... ,,	1 5 0	0 6 0			
rentices .... ,,	1 5 0	0 2 6			
Dressmaking and Millinery.					
en	6 0 0	2 15 0	General dressmakers	1 10 0	0 8 6
od fitters	2 10 0	2 0 0	Machinists	1 2 6	0 12 6
nds	1 15 0	0 7 6	Head mantle-makers	4 0 0	3 0 0
provers............	0 10 0	0 2 6	Mantle-makers	1 17 0	0 9 6
prentices*	0 2 6	....	,, improvers ..	0 5 6	0 2 6
ds	1 15 0	0 6 0	Blouse-makers	1 0 0	0 12 6
rovers	0 7 6	0 3 0	Milliners	2 9 6	0 7 6
rentices*	0 2 6	....	,, improvers	0 10 0	0 2 6
nds................	1 2 6	0 6 0	,, apprentices†	0 2 6	....
provers............	0 6 0	0 2 6			

paid for the first three or six months. † Unpaid for the first six or twelve months.

Furriers.					
....	3 0 0	1 7 6	Fur-sewers	1 5 0	0 10 0
....	0 12 0	0 9 0			
Hats and Caps.					
en	3 0 0	0 17 6	Machinists ....Females	1 15 0	0 7 0
...........Males	0 12 6	0 7 6	Finishers .... ,,	0 15 0	0 6 0
es .... ,,	0 10 0	....	Trimmers .... ,,	1 2 6	0 5 0
....	3 15 0	2 15 0	Improvers, &c. .... ,,	0 10 6	0 4 6
en	1 2 6	....			
Shirtmaking.					
ters ....Females	3 0 0	2 0 0	Machinists ....Females	1 0 0	0 15 0
kers .... ,,	1 5 0	0 8 0	Finishers .... ,,	0 13 0	....
ces .... ,,	0 7 0	0 5 0	Button-hole workers ,,	6d. ℔ doz.	....
Waterproof Clothing.					
en	3 15 0	2 10 0	Finishers, improvers	0 7 6	0 5 0
s..................	1 0 0	0 12 0	Table hands	1 5 0	0 10 0
improvers	0 10 0	0 4 6	,, improvers	0 7 6	0 2 6
....	0 15 0	0 12 0			
White Work and Ladies' and Children's Clothing.					
en, designers, and ....Females	2 5 0	0 18 0	Learners ....Females	0 7 0	0 2 6
s.......... ,,	1 12 9	0 10 0	Pressers............ ,,	0 16 0	0 7 6
improvers.. ,,	0 10 0	0 7 0	Sorters .... ,,	1 0 0	0 6 6
apprentices ,,	0 4 0	0 2 6	Cutters ....Males	2 0 0	1 0 0
s............ ,,	1 0 0	0 6 0	Pressers.............. ,,	1 15 0	....

Occupation.	Maximum.	Minimum.	Occupation.	Maximum.
III.—Persons engaged in the Manufacture of Clothing and Textile Fabrics—cont.				
Woollen Mills.				
	£ s. d.	£ s. d.		£ s. d.
Foremen	5 0 0	4 0 0	Weavers	2 10 0
Carders	2 0 0	2 0 0	Twisters	0 15 0
Wool-sorters	2 5 0	2 0 0	General-hands	1 10 0
Finishers	2 5 0	2 0 0	Engineers	3 0 0
Dyers	2 0 0	2 0 0	Boys	0 10 0
" Assistants	1 10 0	0 15 0	Weavers (females)	1 11 0
Spinners	2 15 0	1 2 6	Finishers "	0 12 0
Warpers	1 10 0	1 0 0	Buriers "	0 17 0
Wool-scourers	2 0 0	1 15 0	Girls	0 12 0
Pressmen	2 0 0	1 10 0		
IV.—Persons Engaged in Connection with Building Materials, etc.				
Asphalting and Tar-paving.				
Asphalt-makers	2 2 0	1 15 0	Wood-block makers	2 2 0
Brickworks.				
Foremen	4 0 0	2 8 0	Pressers	2 10 0
Clay-diggers and pitmen	2 8 0	1 16 0	Burners	3 10 0
Panmen and grinders	2 10 0	1 15 0	Loaders-out	2 10 0
Setters	2 8 0	1 16 0	Stackers	2 8 0
Brickmakers and moulders	2 15 0	1 16 0	Carters	2 5 0
Cement.				
Millers	3 10 0	3 0 0	Kiln-fillers	2 5 0
Burners	2 12 0	2 0 0	Labourers	2 0 0
Joinery, Wood-turning, and Carving.				
Foremen	3 12 0	3 0 0	Carvers	3 3 0
Joiners	3 0 0	1 16 0	Apprentices	0 15 0
Turners	3 0 0	1 10 0		
Lime Works.				
Foremen	3 0 0	....	Lime-drawers	2 5 0
Quarrymen	2 5 0	2 0 0	Burners	2 8 0
Crane-drivers	2 0 0	1 16 0		
Marble and Monumental Masons.				
Foremen	3 0 0	2 10 0	Polishers' improvers	1 0 0
Letter cutters and carvers	3 0 0	2 0 0	Fixers	2 5 0
Marble and stone masons	3 5 0	1 10 0	Carters	2 2 0
Marble and stone masons' improvers	1 10 0	0 15 0	Boys	0 10 0
Polishers	2 5 0	1 10 0	Bricklayers	2 14 0
Modelling, Cement and Plaster Decorations.				
Modellers	3 0 0	....	Casters	1 0 0
Pressers	2 5 0	1 10 0		
Paint and Varnish.				
Manufacturers	5 0 0	2 10 0	Labourers	1 15 0

—Persons Engaged in Connection with Building Materials, etc.—*continued.*

Potteries.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
	3 10 0	2 8 0	Burners	2 15 0	2 0 0
	3 0 0	2 0 0	Clay-getters	2 8 0	1 10 0
rs	3 0 0	2 0 0			

Quarrying and Stone Crushing.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	3 0 0	....	Stone-breakers	2 2 0	1 10 0
	2 5 0	2 0 0	Stone-feeders	2 0 0	1 16 0
	2 10 0	2 0 0			

Saw Mills.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	4 0 0	2 8 0	Tailers-out	1 5 0	0 15 0
ners	2 8 0	1 10 0	Labourers	2 2 0	1 10 0
	2 10 0	1 10 0	Draymen	2 5 0	1 10 0
assistants	2 0 0	1 0 0	Mill hands	2 7 6	1 10 0
	3 0 0	1 10 0	Machinists	3 3 0	2 0 0
sistants	1 10 0	0 12 6	Machinists' assistants	1 10 0	0 10 0
	2 5 0	1 16 0	Engineers	3 5 0	2 0 0

V.—Persons engaged in Engineering, Metal Works, etc.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	5 0 0	3 0 0	Plumbers' boys	0 15 0	0 5 0
	3 5 0	1 14 0	Meter-makers	3 3 0	1 10 0
	3 0 0	1 18 0	Painters	3 0 0	1 10 0
d fitters	5 0 0	2 5 0	Stove-fitters	3 0 0	1 5 0
hs	3 0 0	1 10 0	Galvanisers	3 10 0	1 5 0
	2 0 0	1 5 0	Wire-workers	3 3 0	1 6 0
lers	2 10 0	1 15 0	Japanners	2 10 0	1 3 0
ders	3 10 0	1 16 0	Engine-drivers and firemen	3 0 0	1 10 0
assistants	0 18 0	0 5 0	Bricklayers	3 0 0	2 2 0
ers	2 8 0	1 12 0	Carpenters	3 0 0	1 10 0
en	2 6 0	1 10 0	Labourers	2 2 0	1 10 0
akers	2 14 0	1 12 0	Carters	2 9 0	1 10 0
ters	3 0 0	1 16 0	Storekeepers	2 10 0	1 10 0
ths	3 3 0	2 10 0	Drillers	1 16 0	0 8 0
ders	3 0 0	1 10 0	Trunk-makers	2 5 0	1 5 0
ers	3 3 0	1 16 0	Canister-makers	3 0 0	1 10 0
	3 0 0	1 10 0	Lead-millers	3 6 0	....
assistants	1 5 0	0 6 0	Apprentices	1 10 0	0 4 0
	3 0 0	2 10 0	Boys	0 15 0	0 5 0
and gasfitters	3 0 0	1 10 0			

VI.—Persons engaged in Ship-building, Repairing, etc.

Ship-building, Docks, etc.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	7 0 0	3 0 0	Ship-joiners	3 0 0	2 8 0
ts	3 12 0	2 8 0	Marine opticians	3 0 0	2 0 0
ters and riveters	3 8 0	2 10 0	Ship's compasses, sextants, and barometer repairers	3 0 0	2 0 0
akers	3 0 0	2 5 0			
ers	2 8 0	2 0 0			

Sails and Tarpaulins.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
s	3 0 0	1 5 0	Apprentices and boys	0 18 0	0 5 0
tarpaulin makers	2 7 0	0 15 0	Forewomen	1 10 0	....
nds	1 10 0	0 10 0	Women and girls	0 19 0	0 6 0

VII.—Persons engaged in the Manufacture of Furniture, Bedding, etc.

Occupation.	Maximum. £	s.	d.	Minimum. £	s.	d.
Foremen	4	10	0	2	10	0
Machinists	2	14	0	1	7	6
„ apprentices	0	15	0	0	10	0
Cabinet-makers	2	16	0	1	10	0
„ apprentices	1	6	0	0	2	6
Polishers	3	0	0	2	0	0
„ apprentices	1	7	6	0	7	6
Chair-makers	2	16	0	1	9	0
Chair-fitters	2	12	0	1	5	0
Frame-makers	2	5	0	1	10	0
Wood-carvers	3	0	0	2	10	0
Wood-turners	2	0	0	1	16	0
Upholsterers	3	0	0	2	0	0
„ apprentices	1	10	0	0	5	0
Carpet hands	3	0	0	1	15	0
Drapery-cutters	4	5	0	2	2	0
Forewomen	1	10	0	1	5	0
Upholsteresses	2	0	0	0	12	6
Girls	0	9	0	0	5	0
Drapery hands ...... Females	2	0	0	0	16	0
Machinists „	1	2	6	0	10	0
Seamstresses	1	2	6	0	9	0
Carpet-sewers ...... Females	1	5	0	0	10	0
Girls	0	10	0	0	5	0

Occupation.	Maximum. £	s.	d.	Minimum. £	s.
Window blind makers and fixers	2	10	0	1	
Boys	0	17	6	0	
Venetian-blind makers	2	10	0	1	
„ painters	2	5	0	1	
Revolving shutter makers	2	14	0	1	
Mattress-makers	2	18	0	1	
Picture frame makers	4	0	0	1	
Mount-cutters	2	18	0	1	
Apprentices	1	5	0	0	
Fitters	1	10	0	1	
Girls	1	0	0	0	
Hair and flock hands—					
Packers	2	14	0	0	
Machinists	1	16	0	0	
Rag-sorters ...... Females	1	0	0	0	
Cloth-cutters ...... „	0	12	0	0	
Billiard-table makers	3	0	0	2	
Apprentices	0	12	6	0	
Ivory turners	3	0	0	2	
Chinese cabinet-makers	3	0	6	0	
„ polishers	1	16	0	0	17
„ wood-turners	1	12	0	1	4
„ sand-paperers	1	10	0	0	15

VIII.—Persons engaged in Printing, Lithographing Establishments, etc.

Occupation.	Maximum. £	s.	d.	Minimum. £	s.	d.
Readers	3	0	0	2	0	0
Readers' assistants	2	0	0	0	15	0
Compositors, jobbing offices—						
Journeymen	3	10	0	1	5	0
Improvers	2	0	0	0	17	6
Apprentices	1	0	0	0	5	0
Compositors, newspaper offices—						
Foremen	7	0	0	3	0	0
Machine compositors	4½d. to 5d.			per 1,000 ens.		
Compositors	9d to 1s 1d.					
Linotype operators	3d.					
Female type distributors	1½d. with allowances.					
Machinists' boys	0	15	0	0	6	6
Apprentices	1	5	0	0	10	0
Letter-press machinists—						
Foremen	6	0	0	2	10	0
Journeymen	4	0	0	1	10	0
Improvers	1	10	0	0	14	0
Apprentices	0	15	0	0	8	0
Stereotypers—						
Foremen	6	0	0	3	10	0
Journeymen	3	0	0	1	15	0
Electrotypers—						
Journeymen	3	15	0	1	15	0
Engravers	4	0	0	2	0	0
Lithographers—						
Journeymen	4	0	0	2	0	0
Improvers	1	10	0	1	0	0
Apprentices	1	0	0	0	6	0
Stone polishers and cleaners	1	12	6	0	15	0

Occupation.	Maximum. £	s.	d.	Minimum. £	s.
Lithographers—*continued.*					
Artists, illuminators, and photographers	6	10	0	1	15
Artists' apprentices	0	17	6	0	7
Cutters	2	16	0	2	12
Varnishers, transferrers, &c.	3	0	0	2	0
Feed and fly boys	1	0	0	0	5
General hands	2	0	0	1	5
Engineers and firemen	8	0	0	1	10
Bookbinders—					
Foremen	5	0	0	2	0
Rulers	4	0	0	1	0
Binders	4	0	0	1	0
Finishers	3	10	0	1	0
Forewomen	1	10	0	0	17
Booksewers .... Females	1	10	0	0	10
Bookfolders .... „	1	5	0	0	5
Embossers	1	0	0	0	5
Numberers, pagers, wire-stitchers, packers, &c. (females)	1	0	0	0	5
Apprentices ...... Males	1	0	0	0	7
„ .... Females	0	7	6	0	2
Boys, messengers, &c.	0	12	6	0	5
Paper boxes and bags—					
Foremen	2	15	0	2	
Forewomen	1	10	0	0	
Cutters	2	0	0	0	
Boys	0	14	0	0	
Girls (box and bag makers)	1	10	0	0	
Apprentices	0	4	0		
General hands	2	5	0		

—Persons engaged in the Manufacture of Vehicles, Saddlery, and Harness.

Coach-building.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
	4 0 0	2 10 0	Trimmers	3 0 0	1 15 0
s	3 0 0	1 10 0	Painters	3 0 0	1 0 0
ers	3 0 0	1 15 0	Nave turners	2 5 0	1 16 0
ghts	3 0 0	1 15 0	Spoke turners	2 5 0	1 16 0
hs	3 0 0	1 10 0	Improvers	1 10 0	0 15 0
	1 10 0	0 10 0	Apprentices	1 0 0	0 5 0
	2 8 0	1 5 0			

Saddlery and Harness.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	3 5 0	2 10 0	General hands	2 10 0	1 0 0
kers	2 10 0	1 10 6	Machinists	2 0 0	1 15 0
akers	3 0 0	1 15 0	Female hands	1 15 0	0 7 6
kers	3 0 0	1 1 0	Improvers	1 2 6	0 10 0
ds	2 15 0	1 5 0	Apprentices	0 17 6	0 5 0

Making and Repairing Bicycles.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	3 0 0	2 10 0	Tyre and wheel makers	2 7 6	1 5 0
	2 15 0	1 10 0	General hands	2 0 0	1 5 0
	2 10 0	1 10 0	Boys	0 10 0	0 6 0

X.—Persons engaged in the Production of Light, Fuel, Heat, etc.

Electric Light Works.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	3 10 0	3 0 0	Electricians	3 10 0	2 0 0
	4 10 0	2 10 0	Installing workmen	2 10 0	2 0 0

Gas Works.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	6 0 0	3 10 0	Main-layers	2 15 0	1 16 0
d Firemen	2 18 0	2 2 0	Service-layers	2 15 0	1 16 0
	3 6 0	2 8 0	Lamplighters	1 12 0	....
	2 15 0	2 5 0			

Fuel.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
nd yardsmen	3 0 0	1 10 0	Boys	1 0 0	0 5 0
	2 5 0	1 10 0			

XI.—Persons engaged in Miscellaneous Trades.

Baskets and Wickerware, Mats and Matting.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	2 0 0	....	Basket-makers	2 0 0	1 0 0
atting makers	1 10 0	....			
,, (boys)	0 12 0	0 7 0	,, apprentices and boys	0 15 0	0 5 0

Box and Packing Case Making.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	3 0 0	2 10 0	Carters	2 6 0	0 15 0
rs	2 10 0	1 10 0	General hands	2 8 0	1 0 0
	2 2 0	1 10 0	Apprentices	0 10 0	0 7 6
s	2 8 0	1 10 0	Boys	0 13 0	0 5 0

Broom-making.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
akers	2 5 0	1 10 0	Broom-sewers	2 0 0	1 15 0
and apprentices	1 0 0	0 5 0	Sorters	1 8 0	0 5 0

Brush-making.

ccupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
en	3 0 0	1 5 0	Boys and apprentices	0 11 0	0 9 0
ands	0 15 0	0 4 0			

XI.—PERSONS ENGAGED IN MISCELLANEOUS TRADES—*continued.*

Chemicals, Drugs, Patent Medicines, &c.

Occupation.	Maximum.			Minimum.			Occupation.	Maximum.			
	£	s.	d.	£	s.	d.		£	s.	d.	£
Foremen	4	0	0	2	6	0	Bottle washers	1	0	0	0
Manufacturers	2	7	6	1	0	0	Packers	2	5	0	0
Chemists	2	10	0	1	0	0	Forewomen	2	10	0	0
,, improvers	1	5	0	0	7	6	Bottlers and labourers Females	0	15	0	0
Lead burners and platinum men	2	14	0	1	2	0	Packers ,,	1	0	0	0
Acid makers	2	5	0	1	10	0	Manufacturing hands	0	10	0	0

Cooperage.

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Coopers	3	0	0	1	15	0	Machinists	2	0	0	0
Apprentices	1	2	6	0	8	0					

Dye Works.

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Dyers	2	10	0	1	7	6	Feather and glove cleaners, &c.	1	4	0	0
Pressers (males)	2	5	0	1	10	0					
,, (females)	1	4	0	1	1	0					

Explosives.

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Mixers	2	5	0	1	5	0	Packers	1	15	0	1
Cartridge fillers	2	0	0	1	0	0	Labourers	1	18	0	1

Florists.

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Florists and shop assistants Females	1	2	6	0	5	0	....		....		...

Glass Bottle Works.

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Foremen	4	0	0	3	0	0	Engineers and firemen	3	10	0	1
Glass-blowers	3	17	0	1	10	0	Apprentices	1	15	0	0
Packers	1	7	6	0	7	0	Boys	0	15	0	0
Finishers	3	17	0	1	10	0					

Ornamental Glass Works.

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Cutters and silverers	3	0	0	2	0	0	Stencil cutters (boys and girls)	0	8	0	0
Bevellers	3	0	0	1	10	0	Boys	1	0	0	0
Glaziers	2	10	0	1	10	0					
Carters	2	0	0	1	10	0					

Hairdressing and Wig Making.

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Hairdressers and Wigmakers	3	0	0	1	0	0	Hair-frame makers (females)	1	1	0	0
Hair-frame makers	1	10	0	0	5	0					

Laundries (Steam and Hand).

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Wash-house hands (males)	2	5	0	0	15	0	Folders (females)	1	10	6	0
Packers (males)	1	16	0	1	1	0	Starchers ,,	1	5	0	0
Boys	0	10	0	0	7	0	Machine ironers (females)	1	4	0	0
Carters (males)	2	5	0	0	10	0	Calender hands ,,	0	10	0	0
Engineers	2	7	6	1	10	0	*Shirt and collar ironers (females)	2	0	0	0
Firemen	1	5	0	0	15	0	*Starch ironers Females	1	6	0	0
Washers (females)	1	0	0	0	10	0					
	(4/- to 2/- per day)						*Plain ironers ,,	0	18	0	0
Sorters and packers (females)	1	10	0	0	6	0					

* Ironers are paid by piece-work, washers by the day; other branches by weekly wage.

Paper-making.

Occupation.	£	s.	d.	£	s.	d.	Occupation.	£	s.	d.	£
Sorters and classers	2	0	0	1	0	0	Labourers	1	16	0	0
Beatermen	2	10	0	1	5	0	Blacksmiths	2	8	0	...
Rag boilers and cuttermen	1	18	0	0	15	0	Paper sorters (females)	0	15	0	0
Machine men	2	10	0	0	12	6					

ation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
XI.—Persons Engaged in Miscellaneous Trades—*continued.*					
Perambulator Making.					
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
	2 2 0	1 15 0	Upholsterers	1 10 0	1 0 0
	2 2 0	1 1 0	Boys	0 10 0	0 6 0
	2 5 0	1 0 0	Machinists (females)	1 0 0	0 10 0
	1 0 0	0 10 0			
Photography.					
	4 10 0	2 0 0	Framers	2 5 0	0 17 6
	2 10 0	1 0 0	Retouchers (females)	1 15 0	0 12 6
ants	1 0 0	0 7 6	Printers ,,	1 6 0	0 5 0
	3 5 0	1 10 0	Spotters ,,	1 12 6	0 5 0
	2 15 0	1 10 0	Sorters ,,	0 7 6	0 5 0
	3 0 0	2 0 0			
Portmanteaus and Bags.					
	3 0 0	1 10 0	Blacksmiths and japanners	1 15 0	0 15 6
sistants	1 10 0	0 16 0	Machinists (females)	1 4 0	0 6 0
	1 2 6	0 7 6			
portmanteau	3 0 0	1 10 0			
Rope Works.					
	4 10 0	4 0 0	Handspinners	2 5 0	1 10 0
	2 8 0	2 2 0	Machinists	1 10 0	0 18 0
	2 0 0	1 10 0	Jenny boys	0 15 0	0 6 0
Rubber Works.					
	3 0 0	2 0 0	Boys	1 0 0	0 10 0
Sewing Machines, Pianos, &c.					
	4 0 0	3 10 0	Apprentices and boys	1 0 0	0 5 0
	5 0 0	2 0 0	Stringers and spinners	1 5 0	0 10 0
	3 12 0	1 0 0	Packers and fitters-up	2 8 0	1 10 0
	4 0 0	1 2 6			
Soap and Candle Works.					
andle makers	2 10 0	1 4 0	Coopers	3 0 0	2 10 0
	1 10 0	0 15 0			
	3 0 0	1 16 0	Carpenters, box-makers, and plumbers	2 5 0	2 0 0
	1 10 0	0 5 0	Engineers and firemen	2 10 0	1 0 0
	1 10 0	0 10 0	Boys	0 15 0	0 5 0
	1 16 0	1 0 0	Packers (females)	1 0 0	0 6 0
Tobacco and Cigarettes.					
	5 0 0	2 15 0	Finishers	2 15 0	1 10 0
hands	2 10 0	1 0 0	Cigarette machinists	3 10 0	1 15 0
	2 5 0	1 0 0	Engineers and firemen	5 0 0	2 0 0
	3 0 0	1 5 0	Boys—General work	0 16 0	0 5 0
	1 5 0	0 12 0	Forewomen	1 10 0	0 15 0
	3 5 0	1 2 0	Stemmers (females)	1 0 0	0 10 0
	2 10 0	0 12 0	Coverers ,,	1 13 0	0 15 0
	2 5 0	0 15 0	Cutting-room hands (females)	1 0 0	0 10 0
Cigarette Making.					
s (females)	0 14 0	0 7 0			
ters ,,	1 4 0	0 16 0	Filling and closing, &c. (females)	0 8 0	0 5 0
makers (females)	0 16 6	0 12 6	Packers (females)	0 17 0	0 7 0
Umbrella-making.					
	2 5 0	0 12 0	Females	1 5 0	0 10 0

XI.—Persons engaged in Miscellaneous Trades—*continued.*

Watch-making, Jewellery, etc.

Occupation.	Maximum.	Minimum.	Occupation.	Maximum.
	£ s. d.	£ s. d.		£ s. d
Watchmakers	5 0 0	1 10 0	Gem cutters	3 0 0
,, apprentices	0 10 0	0 5 0	Engravers	5 0 [illegible]
Jewellers	6 0 0	1 10 0	Packers	1 7 [illegible]
,, apprentices	0 10 0	....	Electroplaters	4 0 [illegible]
Instrument-makers	3 0 0	1 2 6	Burnishers (females)	1 10 [illegible]
Opticians	2 10 0	1 10 0	Boys	0 17 [illegible]
Polishers	2 15 0	1 5 0		

Coal-mines.

The rates of pay given here were those ruling in 1897 for work actually done. It doe that the miners and other hands were able to secure anything like regular employmen rates.

	Northern Mines.			Southern
	per ton.			per
Miners	0 2 11	....	Miners	0 2 [illegible]
	per day.			per
	£ s. d.	£ s. d.		£ s. d.
Overmen (underground)	0 13 0	0 10 0	Overmen (underground)	0 12 [illegible]
Deputy overmen	0 8 6	0 8 0	Deputy overmen	0 8 [illegible]
Shiftmen	0 8 0	....	Shiftmen	0 8 [illegible]
Onsetters	0 7 0	0 6 0	Onsetters	0 7 [illegible]
Banksmen	0 7 0	0 6 6	Banksmen	[illegible] 6 [illegible]
Screenmen and boys	0 7 0	0 2 9	Screenmen	0 6 6
Mechanics	0 10 0	0 8 6	Mechanics	0 10 [illegible]
Engineers	0 12 0	0 9 0	Engineers	0 9 [illegible]
Engine-drivers	0 9 0	....	Engine-drivers	[illegible] [illegible] [illegible]
Enginemen and firemen	0 7 6	0 6 6	Enginemen and firemen	[illegible] 8 [illegible]
Screen-overmen	0 7 6	0 7 0	Screen-overmen	....
Overmen (overground)	0 8 0	....	Overmen (overground)	....
Locomotive-engine stokers	0 8 0	0 6 6	Locomotive-engine stokers	0 7 [illegible]
Platelayers	0 8 6	0 6 6	Platelayers	0 9 0
Furnacemen	0 8 0	0 7 0	Furnacemen	0 7 [illegible]
Harness-makers	0 8 0	....	Harness-makers	0 8 0
Pickers	0 3 0	0 2 0	Pickers	0 6 6
Wheelers	0 7 0	0 5 0	Wheelers	0 7 6
Water-bailers	0 7 0	0 6 6	Water-bailers	0 7 6
Horse-drivers	0 6 6	0 5 0	Horse-drivers	0 7 6
Stablemen	0 7 6	0 7 0	Stablemen	0 8 0
Labourers	0 6 6	0 6 0	Labourers	0 6 6
Flatters	0 7 6	0 7 0	Flatters	0 7 0
Trappers	0 3 6	0 3 0	Trappers	0 4 0
Boys	0 5 0	0 2 3	Boys	0 2 6

Note.—The Union rules fix 43½ hours as the maximum working hours per week for mi actual time worked during 1897 did not average more than 32 hours for miners and 4 mechanical trades.

Silver-mines, Broken Hill District.

Mechanics and surface hands—	per day.	per day.	Mechanics and surface Hands—*continued.*	per day.
Engineers	0 10 6	0 9 0	Labourers	0 7 6
Masons and bricklayers	0 10 6	0 10 0	Boys	0 4 0
Carpenters	0 10 6	0 9 0	Tappers	0 9 [illegible]
Blacksmiths	0 10 6	0 8 4	Slag-wheelers	0 8 4
Blacksmiths' strikers	0 7 6	....	Feeders	0 9 [illegible]
Engine-drivers, stationary	0 9 0	0 8 0	Charge-wheelers	0 8 4
,, hoisting	0 10 0	....	Underground Hands—	
Firemen	0 8 4	....	Miners	0 9 [illegible]
Firemen's assistants	0 7 6	....	Brace and platmen	0 8 4
Boilermakers	0 10 6	0 9 0	Truckers	0 7 [illegible]
Tinsmiths	0 10 0	....	Ore-dressing Hands—	
Horse-drivers (exclusive of time occupied in cleaning and harnessing)	0 8 4	0 8 0	Shift washers	[illegible] [illegible] [illegible]
			Engine-drivers, stationary	[illegible] [illegible] [illegible]

Note.—Wages are calculated at per day of eight hours. All time worked over [illegible] day is paid for at the rate of time and a quarter (Sundays not excepted).

XI.—Persons Engaged in Miscellaneous Trades—*continued.*

Railways and Tramways.

cupation.	Maximum.	Minimum.	Occupation.	Maximum.	Minimum.
	per annum.			per annum.	
aff)—	£	£	(Salaried Staff)—*continued.*	£	£
asters*	350	150	Operators	200	60
-charge	210	130	Clerks	350	125
icers	185	120	Junior Clerks	120	30
	per day.			per day.	
ff)—	£ s. d.	£ s. d.	(Wages Staff)—*continued.*	£ s. d.	£ s. d
ve Engine-drivers	0 15 0	0 11 0	Carriage and Waggon Examiners	0 13 0	0 7 6
Firemen	0 10 0	0 8 0	Carpenters	0 13 0	0 7 6
Cleaners	0 7 0	0 2 6	Painters	0 11 0	0 7 6
	0 15 0	0 8 0	Stationary Engine-drivers	0 10 0	0 7 6
	0 12 8	0 8 0	Fuelmen	0 9 0	0 6 6
s	0 12 0	0 6 0	Oilers	0 8 0	0 6 6
kers	0 14 0	0 8 0	Pumpers	0 10 0	0 6 6
kers' Assistants	0 8 6	0 6 6	Guards	0 12 0	0 9 0
	0 14 0	0 8 0	Assistant Guards	0 8 6	0 8 0
ths	0 16 0	0 8 0	Porters	0 10 0	0 6 0
	0 8 2	0 6 6	Junior Porters	0 5 0	0 2 6
s	0 11 0	0 9 8	Signalmen	0 11 6	0 7 6
akers	0 16 0	0 10 0	Shunters	0 11 0	0 7 0
	0 12 0	0 8 6	Gangers	0 12 0	0 8 6
and Waggon s	0 14 6	0 9 4	Fettlers and Labourers	0 8 6	0 6 0

* Quarters allowed in addition to salary.

Shipping.

	per month.			per month.	
rs (Steamers)	15 0 0	10 0 0	Firemen	8 0 0	....
(Sailing Vessels	8 0 0	6 10 0	Boatswains	7 0 0	....
ers (Steamers)	12 0 0	10 0 0	Seamen (Steamers)	6 0 0	....
(Sailing Vessels	6 0 0	5 0 0	,, (Sailing Vessels)	4 0 0	3 10 0
rs (Steamers)	10 0 0	9 0 0	Trimmers	6 0 0	....
eers	25 0 0	20 0 0	Sea Cooks	11 0 0	5 0 0
gineers	18 0 0	16 0 0	Chief Stewards	12 0 0	10 0 0
neers	15 0 0	14 0 0	Assistant Stewards	5 0 0	3 0 0
gineers	12 0 0	....			
	per hour.			per hour.	
bourers and s	0 1 0	0 0 10	Wharf Labourers and Lumpers (Overtime)	0 1 6	0 1 0
				per week.	
urers and Lumpers (constant hands)				2 5 0	2 2 0

he rates quoted for steamers are those paid by owners belonging to the Steamship Owners' of Australasia. Some owners of small steamers pay lower rates, and on ships trading lands and foreign parts the monthly rates paid to seamen range from £3 15s. to £3.

Coaching.

	per week.			per week.	
d Trollymen	2 0 0	1 16 0	Grooms	1 10 0	1 0 0
icensed)	1 15 0	1 5 0	Omnibus Drivers	2 0 0	1 5 0
	2 5 0	2 0 0	Omnibus conductors (boys)	0 12 6	0 10 0

XI.—Persons Engaged in Miscellaneous Trades—continued.

Attendance and Service.

Occupation.	Maximum.	Minimum.	Occupation.	Maximum.
	per week.			per
Males—	£ s. d.	£ s. d.	**Females—**	£ s. d.
Barmen	1 5 0	0 15 0	Barmaids	1 2 6
Butlers	1 0 0	0 15 0	Cooks	1 0 0
Coachmen	1 5 0	0 15 0	General Servants	0 15 0
Cooks	2 0 0	0 15 0	House and Parlour Maids	0 10 0
Dairymen	0 18 0	0 10 0	Laundresses	1 0 0
Gardeners	1 0 0	0 15 0	Nursemaids	0 10 0
Gardeners' Labourers	0 15 0	0 10 0	Waitresses	0 15 0
Sculleryman	0 17 6	0 3 0		
Waiters	1 0 0	0 15 0		

Note.—Board and lodging is provided in addition to the wages quoted.

Shop Assistants.

Occupation.	Maximum.	Minimum.	Occupation.	Maximum.
Males—			**Females—**	
Butchers*	3 0 0	2 0 0	Milliners	2 0 0
Drapers	3 15 0	1 10 0	Drapers	3 0 0
„ (Juniors)	1 10 0	0 15 0	„ (Juniors)	1 5 0
Grocers	2 15 0	1 10 0	General	2 0 0
Ironmongers	3 10 0	1 10 0	Girls	0 5 0
General	2 5 0	1 10 0		
Boys	0 10 0	0 7 0		

Note.—At the Abattoirs butchers are paid by piecework, and when in full employment to earn over £7 per week, out of which they have each to pay an assistant.

In some shops, assistants (male and female) are, in addition to the wages here quoted, with a midday meal, and, when working late, with tea.

* Meals provided in addition.

Municipal Employees (City).

Occupation.	Maximum.	Minimum.	Occupation.	Maximum.
Overseers	3 6 0	2 14 0	Carters	3 3 0
Timekeepers	3 6 0	2 15 0	Inspectors of Wood-blocking	2 8 0
Engineers	3 15 0	2 14 0	House Inspectors	2 8 0
Engine-drivers	3 12 0	....	*Park Rangers	2 12 6
Firemen	2 10 0	2 2 0	*Watchmen	2 9 0
Masons	3 0 0	....	Bailiffs	3 0 0
Plumbers	3 0 0	....	Messengers	2 8 0
Blacksmiths	3 0 0	2 2 0	Tar-pavers and Asphalters	2 2 0
Carpenters	3 9 0	3 0 0	Street Cleaners	2 2 0
Gangers	3 6 0	2 5 0	Metal Gatherers	1 10 0
Labourers	2 2 0	....		

* Working 7 days per week.

Fire Brigade Employees (City).

Occupation.	Maximum.	Minimum.	Occupation.	Maximum.
	per annum.			per
	£	£		£
Foremen	182	172	Firemen	150
Assistant Officers	102	....	Probationers	108

Agricultural and Pastoral Pursuits.

Occupation.	Maximum.	Minimum.	Occupation.	Maximum.
	per week.			per
Boundary Riders	0 17 6	0 15 0	Farm Labourers	0 15 0
Bush Carpenters	1 0 0	0 15 0	Milkers	0 15 0
Cooks (Station)	2 0 0	1 0 0		
	per 100 sheep.			
Shearers	1 0 0	0 17 6		
	per annum.			per
	£	£		£
Married Couples (wife, cook)	70	60	Stockmen	52
(husband, cook)	80	70	Vignerons	[illegible]

Note.—Except in the case of shearers, board and lodging, or rations, are provided the rates quoted.

TRADE UNIONS.

he subject of Trade Unionism has been dealt with by legislation in one instance in this colony—the Trade Union Act of 1881. This sure enacts that the purposes of any trade union shall not be deemed unlawful, so as to render its members liable to criminal prosecu- for conspiracy or otherwise, merely because they are in restraint of le: nor for such a reason shall any agreement or trust be rendered l or voidable. It is declared that nothing in the Act shall enable Court to entertain any legal proceeding instituted with the object directly enforcing or recovering damages for the breach of agreements ween the members of a trade union, concerning the conditions upon ich they shall transact business, employ, or be employed, or for the yment of subscriptions or penalties to the union, or for applica- n of the funds to certain specified purposes: but at the same ne the Act is not to be deemed to make such agreements unlawful. either the Friendly Societies Act nor the Companies Act is to ply to trade unions, nor can the unions be registered under either those Acts. Provision is made, however, for the registration of de unions under the present Act, provided always that if one of e purposes of such trade union be unlawful the registration shall be id. The Registrar of Friendly Societies is appointed Registrar Trade Unions, and provisions are made for the appointment of ustees, treasurers, etc., for the establishment of rules, the preparation annual returns, dissolution or amalgamation, change of name, and ther matters. The term "Trade Union" is defined to mean "any combi- ation, whether temporary or permanent, for regulating the relations etween workmen and employers, or between workmen and workmen, r between employer and employers, for imposing restrictive conditions n the conduct of any trade or business, whether such combination ould or would not, if this Act had not been passed, have been deemed o have been an unlawful combination by reason of some one or more of s purposes being in restraint of trade." Few of the trade unions ave complied with the provisions of the Act relative to returns; consequently particulars in regard to their membership cannot be given with any accuracy.

Only one union for the purpose of regulating the mutual relations of workmen and employers has so far been registered. The unions have in all other cases been established for the promotion of the interests of one class or the other. Under the provisions of the Act 163 unions had been registered up to the end of 1898, of which 8 were societies promoted by employers and 154 by workmen, while one union included both employers and employees. Many of these unions are not now in existence: but it is impossible to say how many remain at the present time, as the Registrar has been unable to reach a large number of the societies. Of the 163 unions registered, only the following thirty-t supplied the statutory return of their operations :—

Name of Union.	Date of last Balance-sheet.	Amount of Funds, at beginning of year.			Receipts during year.			Disbursements during year.			Amount of Funds at end of year.		
		£	s.	d.	£	s.	d.	£	s.	d.	£	s.	
Barrier Branch of the Amalgamated Miners' Association—Broken Hill	30 Sept., 1898	1,333	2	0	529	11	6	908	4	7	960	9	
Federated Seamen's Union of Australia—New South Wales Branch	30 June, 1898	1,358	4	8	830	16	9	465	1	11	1,723	19	
Coal Miners' Mutual Protection Association of the Western District..	2 July, 1897	39	17	1	112	17	6	100	8	4	52	6	
Australasian Association of Operative Plasterers, New South Wales ..	31 May, 1897	41	12	5	5	17	9	12	17	5	34	12	
Sydney Lithographic Society........	30 Sept., 1896	16	13	0	49	12	9	44	7	6	21	18	
New South Wales Amalgamated Railway and Tramway Service Association	31 Mar., 1898	595	17	1	274	8	7	264	3	3	606	2	
Operative Sailmakers' Trade and Burial Society of Sydney	31 Dec., 1897	188	9	7	16	4	0	9	1	0	196	12	
Gas Stokers' Protective Association..	26 Nov., 1897	15	11	6	26	4	6	40	4	8	1	11	
Sydney Progressive Society of Carpenters and Joiners	31 Dec., 1896	342	5	7	29	14	8	86	13	7	285	6	
New South Wales Locomotive Engine Drivers', Firemen's, and Cleaners' Association	31 Dec., 1896	1,365	6	0	454	14	4	391	15	9	1,428	4	
Operative Bricklayers' Trade Society of New South Wales	24 May, 1897	663	8	1	115	14	9	77	18	5	701	4	
Friendly Trade Society of Ironmoulders of New South Wales..	30 Sept., 1896	333	13	10	241	19	3	115	10	9	460	2	
United Labourers' Protective Society of Sydney	24 May, 1897	68	4	7	65	12	0	117	5	0	16	11	7
Amalgamated Society of Carpenters and Joiners	31 Dec., 1896	274	5	4	858	18	7	932	18	4	200	5	7
Newcastle Coal Trimmers' Union ..	28 Sept., 1896	......			34	6	6	21	11	5	12	15	1
Sydney Coal Lumpers' Union	31 Dec., 1896	251	16	5	341	19	3	270	19	10	322	15	10
Amalgamated Society of Journeymen Tailors of New South Wales ...	28 June, 1897	15	8	0	27	6	6	15	1	6	27	13	0
New South Wales Operative Bakers' Association	27 Mar., 1897	159	3	6	218	10	8	194	13	4	183	0	10
Masters and Engineers of Harbour and River Steamers of New South Wales	28 Dec., 1896	898	8	5	308	0	4	232	14	9	973	14	0
New South Wales Typographical Association	31 Dec., 1897	1,207	5	0	471	18	11	453	1	7	1,226	2	4
Colliery Employes' Federation, Northern District, New South Wales	31 Dec., 1897	756	18	4	2,882	12	9	1,428	11	2	2,210	19	11
Builders' and Contractors' Association of New South Wales ..	31 Dec., 1896	573	7	10	286	2	10	343	18	8	515	12	0
Journeymen Coopers' Society of New South Wales	31 Dec., 1897	210	19	1	68	2	2	94	18	5	184	2	10
Barrier Ranges Engine Drivers' and Firemen's Association—Broken Hill	31 Dec., 1897	73	12	2	136	14	10	75	11	3	134	15	9
Australian Fishermen's Benefit and Protective Society................	8 Jan., 1898	107	2	6	24	12	0	17	12	0	114	2	6
Colliery Engine Drivers' Association	31 Dec., 1897	10	8	11	20	12	11	23	18	3	7	3	7
United Licensed Victuallers' Association of New South Wales ...	31 Jan., 1897	128	6	11	804	8	7	863	18	2	68	17	4
United Boilermakers' and Iron Ship Builders' Society	28 Dec., 1897	2,982	16	3	101	10	8	67	7	5	3,016	19	6
Barrier Typographical Society.	30 June, 1897	36	17	9	13	16	10	29	2	10	21	11	9
Newcastle Typographical Association	5 July, 1897	93	15	2	76	2	10	44	1	7	125	16	5
Illawarra District Council—Australian Labour Federation	31 Mar., 1897	303	12	2	988	5	6	847	8	3	444	9	5
Amalgamated Society of Engineers, New South Wales..............	Sept., 1897	790	11	1	2,525	10	10	2,250	18	5	1,044	8	6
Total.............	....	15,246	1	3	12,943	1	10	10,866	19	2	17,322		

The funds at the dates of the balance-sheets were distributed as low :—Savings Bank and fixed deposits, £11,221 11s. 9d. ; current nk accounts and cash in hand, £3,513 0s. 3d. ; and other securities. 587 11s. 11d.

CO-OPERATIVE SOCIETIES.

Part V of the Friendly Societies Act of 1873 deals with the registra n of Co-operative Trading and Industrial Societies. It provides that ny number of persons, not being less than seven, may establish a ciety under this Act for the purpose of carrying on any labour, trade. handicraft, whether wholesale or retail, except the business of nking, which the members of such society voluntarily unite to rry on or exercise, and of applying the profits to any lawful pur ses : and the buying and selling of land, and the working of mines nd quarries, shall be deemed to be a trade within the meaning of this ction." The Act further requires the word "Limited" to be the last ord in the name of every society registered, and limits the interest to held or claimed by any member in any society to the sum of £200.

The provisions of the Act relating to Co-operative Societies have een made use of by the public to a very limited extent. Seventy-five cieties have been registered since the Act came into force, but of these ere were not more than seventeen in existence at the end of 1898. The balance-sheets, published at various dates between June, 1896, nd October, 1898, and extending over periods of three, six, and elve months, show that sixteen of these societies had a share-capital of 17,828, and reserve funds amounting to £13,869, or a total liability o shareholders of £31,697, while their other liabilities amounted to £16,782. Their assets consisted of freehold and other property, £5,402 ; tock in hand, £28,274 ; and other assets, £20,370 ; or a total of £54,046. Leaving liabilities to shareholders out of consideration, there as, therefore, an excess of assets to the amount of £37,264. Irrespective of the assets and liabilities shown, ten of the societies had balances at the credit of profit and loss account, amounting to £7,337, while five societies had debit balances, totalling £1,770.

TRADES CONCILIATION AND ARBITRATION.

After the termination of the maritime strike of 1890 a Royal Commission was appointed for the purpose of inquiring into the causes and means for prevention of industrial disputes. The introduction of a Bill to provide for the establishment of a Council of Conciliation and Arbitration into Parliament early in 1892 was one of the results of this Commission. The bill became law, and was to continue in force for four years from March 31, 1892. Under it two Councils were established—a Council of Arbitration, consisting of three, and a Council of Conciliation, consisting of eighteen members. One of the former and nine of the latter were elected by a majority of the organisations representing the interests of the employers, and a similar number by a

majority of the organisations representing the employees. T
dent of the Council of Arbitration was appointed by the Gove
Executive Council on the recommendation of the other two
of the Council. The regulations under the Act were carried
officer called the Clerk of Awards. From the time the two
were appointed to the end of 1894 only one case of conciliation
of arbitration were dealt with by them. Negotiations were
a large number of other cases, but without success; the pri
the Act being a purely voluntary one, the Councils had
to bring either party to a dispute before the industrial
Parliament having refused to vote supplies for the continuan
Councils during 1895, they came to an end on December
The Act itself, however, remained in force until March 31, 18

In the early part of 1895 the Minister for Public Instru
created Minister for Labour and Industry, and took over th
Bureau. As has already been mentioned on a previous page, a
and Shops Act was passed in 1896, and is administered
Minister for Labour and Industry, assisted by a staff of inspec

The Conciliation and Arbitration Act of 1899 was assented
22nd April of that year, and came into force on the 1st May.
this Act the Minister has power to inquire into the cause of an
between an employer and his workmen, or between different
workmen, and endeavour to effect an amicable settlement of t
ences, failing which he may direct a public inquiry by a Jud
Supreme or District Court, or by the President of the Land C
has power to enter upon the premises and inspect everything c
to throw light upon the cause of the dispute except books or st
of accounts. On the application of both parties to the disput
trator may be appointed, and on the application of one of the
conciliator. No power is given for the enforcement of any
arrived at.

PRODUCTION.

In other chapters of this work details have been given of th
producing industries, so that it is unnecessary to reprodu
here. It will be interesting, however, to group these industries
in one table in order that some idea may be given of their
importance. From the total obtained by adding together the p
of the various industries there must be deducted something to
products twice included, first as the output of one class of ind
secondly as the raw material of a more advanced industry.
agriculture is included the value of green food, which may be
raw material in dairying; grain for swine and poultry fee
appears twice; coal, coke, and timber used in mining appe
mining and forestry, and afterwards in the value of metals ob
smelting; and there are other small items of a like character.
be understood that so far as the manufacturing industry is c

duction is net, raw material in all its forms, including coal, being ed from the totals given. The value of material twice included it £215,300, which forms a deduction from the total of the ng table:—

Industry.	Hands employed.	Value of Production.
	No.	£
cturing and allied processes	67,750	8,872,800
ture	67,551	6,206,000
g and poultry farming	25,443	2,653,300
l industry	27,020	11,823,400
l production	41,208	4,853,300
y and fisheries	7,250	750,000
Total	236,222	35,158,800
ion for raw material twice included		215,300
Net production £		34,943,500

figure £34,943,500 just arrived at is less than the value of pro- n in 1891 by £1,796,260. This fall is due chiefly to the decline in as in nearly every branch of industry there has been a distinct e since the year named. If the same prices had been obtained last r produce as were obtained in 1891 the value of production would een £43,190,200. The following table shows the value of produc- various years from 1871 onwards; additional columns have been so as to show the value of production if prices had remained red, and also the value if 1897 prices only had been obtained:

Year.	Actual Value of Production.	Value if 1871 prices had been obtained.	Value if 1897 prices had been obtained.
	£	£	£
1871	15,379,000	15,379,000	7,972,520
1888	25,180,000	35,044,890	18,167,390
1891	36,739,760	57,338,980	29,724,720
1897	34,943,500	67,406,000	34,943,500

foregoing table is not given with a view of showing that the nce between what was obtained for the production of the colony 7 and the amount which would have been realised had 1871 prices led represents a loss; on the contrary, as has been elsewhere d out, although the colony has suffered by the fall in prices, her chiefly occasioned by the fact that she is a debtor country, and he fall in import values has not been equivalent to the fall in t values. What the table really does show is that the volume of ction has been more than sustained. Compared with population, lue of production shows an average of £26 13s. 3d. per head, of £19 17s. 10d. represents the yield of industries directly connected the soil, a result which very few countries can claim to equal.

INTERNAL COMMUNICATION.

ROADS AND BRIDGES.

FOR many years settlement in New South Wales was restri the narrow belt of land shut in between the Blue Mou and the sea. Several main roads were formed through this c within a few years after the foundation of the colony. These connected the infant towns of Parramatta, Liverpool, Windso Penrith with the metropolis, and were constructed entirely by labour. The abrupt wall of sandstone rising on the farthe of the Nepean barred all access to the interior of the country early as the year 1796 George Bass made an attempt to cro mountain range, but returned after an unsuccessful journey, rep that it was impossible to find a passage even for a person or In 1813 a protracted season of drought, attended by considerable amongst the stock, brought home very clearly to the settle conviction that the future of the colony entirely depended up extension of grazing land beyond the narrow limits within whic were then hemmed. In the month of May of that year Mr. G Blaxland, Mr. W. C. Wentworth, and Lieutenant Lawson atte to find a passage across the mountains. After meeting wit culties which seem astonishing enough to the present generatio have seen a railway carried over the same track by which Ba may be reached in a few hours, these gentlemen succeed opening a way—sometimes by creeping through dense fore others by scaling tremendous precipices—to the vast plains lyin of the Great Cordillera of Australia. They returned on the 6th and shortly afterwards Governor Macquarie sent a party of sur under Mr. George W. Evans, Deputy Surveyor-General, to rep the practicability of making a road. The report was favourab the construction of the great western highway was at once comm the work being performed by gangs of bond labourers. The trac made formed a continuation of the Great Western Road from P and it was completed as far as Bathurst by the 21st January, 18

The discovery of the Bathurst Plains and the completion mountain road gave so great an impetus to settlement that it was impossible to keep pace in the matter of roads with the demands lers. The Government, therefore, contented itself with maintaining roads already constructed, and extending them in the direction of the cipal centres of settlement. For many years these main roads were only ones which received attention. This would perhaps have been icient had the progress of settlement subsequent to 1850 been similar that made during previous years. Such, however, was not the e. The gold discovery entirely altered the circumstances of the ony, and during the period of excitement and change which followed t remarkable event so many new roads were opened, and traffic reased so largely, that the general condition of the public highways s by no means good. The Roads Department was formed as far ck as 1857, and although good service was done by the road neers before that date, the modern system of roadmaking may be said have begun with the creation of the department. It was not, however, til 1864 that the whole of the roads, both main and subordinate, eived attention at the hands of the State.

The principal main roads of the colony are:-

Northern Road—length, 405 miles, from Morpeth to Maryland, New England.

Western Road—length, 338 miles, from Sydney to Warren through Bathurst, Orange, and many other important townships; thence prolonged to the Darling, at Bourke, by a line 175 miles in length.

Southern Road—length, 385 miles, from Sydney to Albury. This road was, before the construction of the railway, the great highway between Sydney and Melbourne.

South Coast Road—length, 250 miles. This road, after leaving Campbelltown, ascends the coast range, along the top of which it runs as far as Coal Cliff. It then traverses the Illawarra district, parallel to the coast, and passes through the rich lands watered by the Shoalhaven, Clyde, and Moruya, as far as Bega, whence it extends, as a minor road, to the southern limit of the colony.

None of these roads has now the importance which it formerly pos- ssed. The railways of the colony for the most part follow the direc- on of the main roads, and attract to themselves nearly all the through affic. The tendency now is to make the roads act as feeders to the ilway, by converging the traffic from outlying districts towards con- enient stations along the line.

The expenditure by the Government upon the different roads is made accordance with the recommendation of the Road Superintendent or the district, which is based upon the requirements for each road. Formerly the roads of the colony were divided into seven classes according to their importance, and the yearly expenditure ranged from £50 per mile n roads in the first class to £5 per mile on those in the seventh class.

The network of roads spreading over the face of the colony is divi
for purposes of maintenance, into road districts and road trusts.
whole colony is divided into sixty-two road districts, each of whi
placed in the charge of a Superintendent, who is directly responsib
the Commissioner for Roads. The Road Superintendents have
greater part of the road communication of the colony outside the muni
boundaries, as well as a portion of the roads within municipalities, u
their care. The road trusts have the supervision of the expenditu
certain grants for the maintenance of roads in districts which are ch
of minor importance; there are, however, certain important roads in
vicinity of the metropolis governed by trusts. The length of road
charge of Road Superintendents on the 30th June, 1898, was 40
miles, while 830 miles were under the care of road trusts. There
also within municipal areas 1,114 miles, which were subsidised by
Department, making a total of 41,975 miles under Government con
Of the 40,031 miles in charge of Road Superintendents, 7,633 miles
metalled, ballasted, gravelled, or corduroyed; 5,651 miles were fo
and drained, and all necessary culverts constructed, but were
metalled; 5,344 miles were cleared and drained; 8,894 miles
cleared only; and 12,509 miles were roads which wind their way thr
the forests of the interior, chiefly along the lines marked out by
cart-wheels of the foremost settlers, forming, in dry weather, adeq
means of communication, although in seasons of rain they are
quently impassable. Besides the roads mentioned, there were 1
miles of mountain passes. Many of these presented the most formi
difficulties, and their construction reflects great credit upon the engine
skill of the officer, now deceased, who for so many years designed
supervised the construction and maintenance of the roads and br
of the colony.

Of the earliest bridges erected in the colony many were built of s
and still exist. Those erected in the period following the exte
of settlement to the interior were chiefly of timber, and have since
replaced, after a life of about twenty-five years. Nearly all the
bridges of recent date are of iron or steel, and some of them
been erected under engineering conditions almost unique, owing to
peculiarity of the river-flow in certain parts of the country. On
30th June, 1898, there were, altogether, 3,225 bridges of 20 feet
and over, covering a length of 286,885 feet; 34,731 culverts und
feet span, 511,393 feet in length; and 16,106 causeways, of a total le
of 393,878 feet. Where local circumstances have not favoured
erection of a bridge, or the traffic has not warranted its construc
a punt or ferry has been introduced. In June, 1898, there were 11
punts, 94 timber punts, 4 horse-boats, and 1 basket ferry. Of the
and boats, 8 were worked by steam-gearing and wire-rope, 82 by
gearing and wire-rope, and 19 by wire-rope without gearing; the
width between mooring posts amounting to 68,392 feet. Also
Department had charge of one steam-launch, 14 iron and 63 ti

›oats, 132 other boats, and 8 punt-slips for the execution of repairs. ı average, 1,824 men were employed during each month of the ıng year, in addition to 6,543 contractors and their employees, ıg a total of 8,367 men.

use of roads as the main arteries along which traffic from the polis to the interior flows has been superseded by the railways; theless, they are still the sole means of communication throughout e part of the interior, besides serving as most valuable feeders to ilway system of the country. No revenue is directly derived from but their indirect advantages to the country have been very great, fter the lands and the railways they form the largest item of ıal property. It is estimated that £18,648,000 has been expended ıds and bridges since 1857, and their present value to the State, ng for depreciation, cannot be less than £14,000,000. Their ct value cannot be calculated; but as an instance of the change ht about by the system of road construction, it may be mentioned ıfter the organisation of the Roads Department on its present the cost of carriage of goods by road and the time of transit were ›d by more than one-half, as will appear from the following ıent:—

Main Roads.	Distance.	Carriage by Road, 1857.				Carriage by Road, 1864.			
		Time in transit.	Cost per ton.			Time in transit.	Cost per ton		
	miles.	days.	£	s.	d.	days.	£	s.	d.
y to Goulburn	134	17½	12	5	0	7½	3	15	0
Bathurst...............	145	23½	15	10	0	11	6	10	0
stle to Murrurundi.......	119	21	9	0	0	8	6	10	0

progress between 1857 and 1864 was very great. Part of the ce may without hesitation be ascribed to improvement of the roads; ıe decline in the demand for teams consequent on the cessation of old rush was also a cause of the fall in the cost of transit. Since the price of carriage by road has not declined, most of the traffic through districts remote from the centres of population, where the ements of the teamsters are costly to supply. The roads followed teams are those leading to the railway lines, and the loading ts for the most part of station supplies, wool, and other produce. ates vary according to the distance and the nature of the country traversed, but the following scale may be taken as typical of ordinary charges for outward loading—that is, from the interi the railways. Inward goods average about 1d. per mile less than outward:—

	s.	d.	
Up to 40 miles	1	3	per ton per mile.
,, 100 ,, ...	1	0	,,
,, 200 ,, ...	0	11	,,
,, 300 ,, ...	0	10	,,

A slight consideration of these figures will be sufficient to show greatly the business of the country has been facilitated by the constru of railways. If 100 miles be assumed as the average distance goods are carried, the prevailing rate by teams would be 12d. per per mile. On the railways, as far back as 1872, the carriage was 3·6d., and to-day it averages not more than 1·6d. It would be stating the case against road carriage, however, if the latter figure compared with the average price charged by teams; but a compa in every respect perfectly fair can be made between the cost of carr general merchandise by rail only 2·25d. per ton per mile and the of sending goods by teams, which, as stated above, is 12d. per ton per The saving by rail carriage is, therefore, over 81 per cent., and had been possible for the whole of the railway traffic for the year to be carried by teams, the cost would have been £8,377,323 ins of the sum of £1,570,748 (exclusive of terminal charges) actually cha by the Railway Commissioners. In the portion of this chapter dev to goods traffic on the railways, particulars are given of the gra cheapening of this form of carriage during the past twenty-five y

During the last few years the old-time spectacle might frequ be seen of huge loads of goods being carried along the main within sight of the railway lines. The price paid to carriers was usually disclosed, but from the nature of things it was probably than would have been paid to the Railway Commissioners for same service. The competition of teams with the railway for carriage of a certain class of goods was made possible by the ext cheapness of fodder and the low price of horses, and to the circumst that a number of carriers could not otherwise find employment; over, it only lasted for a few months in each year, and did not a the railway earnings to any appreciable extent.

The total expenditure on account of roads of all classes, and of bri and culverts, during the year ended 30th June, 1898, was £616,09 which contracts claimed £318,312; wages, £176,126; salaries, £39, materials, miscellaneous and incidental (including road subsidie Municipalities), £82,368. In this expenditure is included the co administering the Department, and payments on account of approaches and similar works incidental to the road traffic of

The expenditure in the construction and maintenance of nd bridges since 1857, with details since the year 1881, is elow. Until recent years, the expenditure on these works d at a much faster rate than the population :—

Year.	Expenditure by Roads Department.	Expenditure by Trustees.	Total.
	£	£	£
1857 to 1880	5,430,923	782,907	6,213,830
1881	484,567	23,186	507,753
1882	577,212	24,722	601,934
1883	613,847	24,938	638,785
1884	750,584	27,722	778,306
1885	800,962	24,404	825,366
1886	628,379	28,414	656,793
1887	721,994	45,433	767,427
1888	663,929	31,503	695,432
1889	632,398	31,361	663,759
1890	770,809	34,500	805,309
1891	965,688	31,990	997,678
1892	859,028	30,605	889,633
1893	676,233	30,330	706,563
*1894-5	800,620	30,034	830,654
†1896	757,115	19,285	776,400
†1897	666,300	9,910	676,210
†1898	605,497	10,601	616,098
Total	17,406,085	1,241,845	18,647,930

* 1894 and first half of 1895. † Year ended June.

ides the roads maintained by the Government, there were, in onth of January, 1898, 7,380 miles of roads and streets belonging l largely maintained by the municipalities of the colony. Of these , 2,381 miles were metalled, gravelled or ballasted, and 1,319 d: while 1,851 miles were cleared, and 1,829 miles not cleared. value without the land, but inclusive of footpaths, kerbing, and ring, is estimated at £5,485,000.

RAILWAYS.

e first attempt to introduce into New South Wales the blessing of ay communication, which has so revolutionised the commerce of lder parts of the world, was made in 1846. On the 26th August at year a meeting was held in Sydney at which it was decided to y a line to connect the metropolis with the city of Goulburn. Two

1898 the average population per mile of line was reduced to 492 increase in the average number of train miles run per inhabita been very rapid, rising from 0·5 mile in 1860 to 1·8 in 1870, 1880, and 7·4 miles in 1890. The maximum was reached in when the train miles run averaged 7·5 per head of the population. the five years ended 30th June, 1898, the rate was, approxim 6 miles to each member of the community. The following stat shows the extension of railway facilities since 1860 :—

Year.	Population to each mile of line.	Number of train miles run.	Number of train miles run per head of population.
1860	4,979	174,249	0·5
1865	2,822	483,446	1·2
1870	1,467	901,139	1·8
1875	1,366	1,472,204	2·5
1880	882	3,239,462	4·4
1885	544	6,638,399	7·2
1890	502	8,008,826	7·4
1891	521	8,410,421	7·5
1892	538	8,356,096	7·2
1893	515	7,505,310	6·3
1894	495	7,169,785	5·9
1895	501	7,594,281	6·1
1896	510	7,719,618	6·0
1897	497	8,130,405	6·2
1898	492	8,340,338	6·1

COMPARISON OF RAILWAY FACILITIES.

New South Wales stands in a good position among the Austra colonies in regard to railway development, as will be seen fro following table, which shows the mileage of Government and p lines open for traffic in the various colonies in the early part of 1

Colony.	Lines Open.		
	Government.	Private.	Total
	miles.	miles.	miles.
New South Wales...	2,691	85	2,776
Victoria	3,113	...	3,113
Queensland ...	2,636	...	2,636
South Australia .	1,869	20	1,889
Western Australia	1,065	391	1,456
Tasmania.......	440	55	495
New Zealand	2,055	167	2,222
Total	13,869	718	14,587

nts of comparison between the railways of a large and thinly-ited country such as New South Wales and those of the countries Old World are difficult to obtain. The following table, however, the average population and the average number of square miles rritory per mile of line open, in the principal countries of the L It will be seen that New South Wales comes fairly well out of omparison :—

Countries.	Length of Railway.	Population per Mile of Line.	Area per Mile of Line.
stralasia :—	miles.	No.	sq. miles.
New South Wales	2,776	477	112
Victoria	3,113	378	28
Queensland	2,636	184	254
South Australia	1,889	192	478
Western Australia	1,456	111	670
Tasmania	495	347	53
New Zealand	2,222	328	47
merica :—			
Argentine Republic	8,998	441	124
Brazil	8,658	1,656	372
Canada	16,550	313	221
Chili	2,504	1,009	116
United States of America	182,600	399	16
urope :—			
Austria-Hungary	19,610	2,109	12
Belgium	2,850	2,130	4
Denmark	1,382	1,572	11
France	25,571	1,506	8
Germany	28,071	1,862	7
Great Britain and Ireland	21,433	1,875	6
Italy	9,593	3,281	12
Netherlands	1,886	2,392	7
Norway	1,088	1,839	114
Portugal	1,339	3,480	26
Russia (exclusive of Finland)	23,388	4,431	83
Spain	7,741	2,353	25
Sweden	6,145	808	28
Switzerland	2,270	1,292	7
Asia :—			
India (inclusive of Native States)	20,114	14,280	78
Japan	2,506	17,042	59
Africa :—			
Cape Colony	2,260	796	129
Natal	420	1,391	49

RAILWAY SYSTEMS.

he railways of New South Wales are divided into three distinct nches, each representing a system of its own. The southern system, uding the principal line of the colony, branches at Junee, and places the important district of Riverina, as far as the town of Hay in direction and Finley in another, in direct communication w Sydney, from which they are distant 454 and 448 miles respecti This branch is termed the south-western line. From several o points of the line, branches connecting other important distri with the metropolis have been opened for traffic. From Culcairn, miles from Albury, a line connects with Corowa, on the Murray; fr Cootamundra a line branches off in a southerly direction to Gunda and another in a north-westerly direction to Temora; while fr Murrumburrah a line has been constructed to Blayney, on the west line, to connect the southern and western systems of the railw of the colony. This branch line has been found of much benefit allowing the direct shipment of stock from the western pasture grou to the Victorian markets. Nearer Sydney, the important town Goulburn will be the centre of a system of branch lines, one of which— that from Goulburn to Cooma—is already laid down, bringing the ri pastoral district of Monaro into direct communication with Sydn From Campbelltown, 34 miles from the metropolis, a line 8 miles length forms a connection between Camden and the southern railway li

The southern main line is the most important of the railway li in the colony, as it passes through the richest and most thick populated districts, and places Sydney, Melbourne, and Adelaide direct communication. The traffic, both passenger and goods, on th southern system generally, is very extensive, and arrangements f the regular carriage of mails between the two great cities enabl letters to be delivered in less than twenty hours. Sleeping-cars a attached to these trains on the New South Wales side, and th comfort of travellers is assured by the introduction of the most moder improvements in the construction and fitting up of the railwa carriages. European mails are landed at Adelaide—which is distan 1,085 miles from Sydney—and forwarded overland to all parts Victoria, New South Wales, and Queensland.

Another line which forms part of the southern system has bee constructed, connecting the metropolis with the coastal district Illawarra, which is rich alike in coal and in the produce of agricultur The present terminus is at Nowra, on the Shoalhaven River, but it proposed to take it eventually to Jervis Bay, closely following the coas line. A proposal has also been made for the construction of a line fro the port of Eden at Twofold Bay, in the south of the colony, to th township of Bega, in the centre of a rich agricultural district, but th is at present in abeyance. At Sydenham, on the Illawarra railway, line, 5 miles in length, branches off to Belmore, and this will no doub eventually be continued to Liverpool, a township on the main Souther line.

The western system of railways extends from Sydney in the directi of the Blue Mountains, of which it reaches the upper levels a littl above Emu Plains by a direct line of steep gradient, which enables th

notive to drag its heavy freight up the abrupt eastern slope of the
ntains. Up to the 18th December, 1892, a zigzag line was used to
le trains to climb this slope of the mountains; but on the date
tioned a deviation by which the zigzag was avoided was opened
traffic. To admit of a direct line of ascent, a tunnel, 32½ chains in
th, had to be constructed through part of a mountain. The line
along the top of the range until it descends into a valley below
unt Clarence by the Lithgow zigzag, the construction of which
a triumph of engineering skill. In its course over the moun-
s the railway passes through magnificent scenery of a character
uliar to this part of the world, and remarkable for its rugged
ndeur. Leaving the mountains, the western line, after throwing
a branch from Wallerawang to Mudgee, enters the Bathurst
ins, and connects with the metropolis the rich agricultural lands
the Bathurst, Orange, and Wellington districts. Beyond Dubbo
enters the pastoral country, and reaches the Darling at Bourke,
3 miles from Sydney. At Blayney, as before stated, the western
e is connected with the southern line by a branch line to Murrum-
rrah; at Orange a branch line, 97 miles in length, connects that
n with Forbes; and from Parkes, one of the stations on this branch
e, an extension to Condobolin, 62½ miles distant, has been constructed.
rther west, on the main line at Nevertire, a short line of 12½ miles
a northerly direction, connects the town of Warren; and at Nyngan,
7 miles from Sydney, a branch line connects the important mining
trict of Cobar with Sydney, affording at the same time rapid and sure
ans of communication with the pastoral country of which Cobar is
o the centre. It has been proposed to continue this line as far as
ilcannia, on the Darling, whence it might be extended to Broken Hill,
meet the South Australian system, but for the present the latter pro-
t remains in abeyance. The western railway system also includes a
ort line from Blacktown to Richmond, on the Hawkesbury River.

The northern system originally commenced at Newcastle, but a con-
cting line between Strathfield and Hamilton has been constructed,
aking Sydney the head of the whole of the railway systems of the
lony. The Hawkesbury River has been crossed by an iron bridge,
896 feet long, in seven spans, the iron superstructure of which cost
327,000. This connecting line permits of direct communication between
delaide, Melbourne, Sydney, and Brisbane, a distance from end to
d of 1,808 miles, or, altogether, between the termini of Oodnadatta,
South Australia, and Cunnamulla, in Queensland, there is one con-
uous line of railway, 3,100 miles in length. The northern line runs
a Newcastle and the great coal centres through the rich agricultural
istrict of the Hunter Valley, to the important part of the colony known
New England, passing through some of the largest inland towns in New
outh Wales, such as Maitland. The country traversed north of Newcastle
extremely fertile. As the line goes farther north it passes through a
ch pastoral and agricultural territory, and some important townships

are reached, viz., Tamworth, Armidale, Glen Innes, and Tenterfield 11 miles beyond the last-mentioned township the line cross border at Jennings or Wallangarra, where a junction is effected the Queensland railways.

The northern system also comprises a branch from Werris Cre Moree, in the north-west of the colony, which is now being ext to Inverell, thus placing the Namoi and Gwydir pastoral distri direct communication with the ports of Newcastle and Sydney. New England district a line has long been projected, which connect the town of Glen Innes with the city of Grafton, on the Cl River: an alternative line has been surveyed to connect the Cl and New England districts, the proposed junction on the northe being at Llangothlin, but both this route and the one proposed Glen Innes to Grafton present physical difficulties of such a mag that it is doubtful if either line will be carried out, at all eve some time to come. A portion of the North Coast railway, 61 m length, from Murwillumbah, on the Tweed, to Lismore, on the mond, was opened for traffic in 1894.

A short line branches off the main northern line at Hornsby, 21 from Sydney, and connects with the north shore of Port Jack Milson's Point. Proposals have been made from time to time to the harbour, or to tunnel beneath it, and thus allow direct comm tion by rail between the suburbs on the north and the city on the shore. In 1896 various proposals were submitted to a Parliam Committee, who reported in favour of a tunnel, and this actic endorsed by the Assembly when considering the private bills intr for the purpose of providing the means of communication betwe city and North Sydney. So far, however, legislative sanction construction of such a work has not been secured.

GRADIENTS.

The railways of the colony have been constructed with a larg portion of steep gradients, but much has been done during the la years to reduce some of the heaviest of these. The Railway missioners, in one of their Annual Reports, drew a comparison b the New South Wales lines and the Alpine railways, and it was that the gradients were steeper, and the curves sharper, on the l this colony than on the Alpine lines. By reducing some of the ents, and introducing locomotives of greater power than were fo employed, considerable economy in working, as well as the exp of traffic, has been effected. The traffic is now carried on more factorily, and the expense of extensive duplication works, which have been necessary under the system which previously existe been postponed for years. However, a great deal remains to be plished in the matter of reducing gradients, as will be seen on ref he following table, which shows the number of miles on different dients in February, 1899. The distances given include the increased gth of lines for deviations, and are therefore in excess of the timele distances:—

Gradients.	Southern System.	Western System.	Northern System.	Total.
1 in	miles.	miles.	miles.	miles.
18 to 30	4¼	1½	Nil.	5¾
31 „ 40	57	73½	34½	165
41 „ 50	59¾	50½	70½	180¾
51 „ 60	38¼	54¼	42½	135
61 „ 70	44	49¼	25	118¼
71 „ 80	67¾	47½	53	168¼
81 „ 90	30½	35	18¼	83¾
91 „ 100	50¼	69¼	47¼	166¾
101 „ 150	103¼	100¾	77¼	281¼
151 „ 200	60¼	51¼	47½	159
201 „ 250	29¾	20½	19¼	69½
251 „ 300	39½	32¼	28¾	100½
301 „ level	451	367¾	263¾	1,082½
Total.......	1,035½	953¼	727½	2,716¼

COST OF CONSTRUCTION.

The following table shows the cost of construction of the various anches of the railway system to the middle of the year 1898. The erage cost of the whole of the lines is calculated to be £12,004 r mile, including all charges except those for rolling-stock, machinery, d workshops—a figure which, considering the character of some rts of the country through which the lines have been carried, and cost of labour, which is considerably greater in Australia than most other countries, is by no means a high one. In considering in tail the figures given, it is interesting to note the comparative low cost r mile of some of the extensions through pastoral country. The ne from Nyngan to Cobar averaged £3,715 per mile; that from olong to Forbes, £5,321; from Junee to Hay, £5,793; from Werris reek to Narrabri, £5,874; and from Dubbo to Bourke, £5,974. The ne from Cootamundra to Temora was also cheaply constructed, the erage cost per mile being £4,314. But the lines of the "Pioneer" es in a special manner show that in certain districts of the colony ilways capable of effectively carrying the traffic can be constructed an average cost far below what had previously been attempted. e average cost of the line from Nevertire to Warren was £1,987 r mile; that from Narrabri to Moree £2,200 per mile; that from rilderie to Berrigan, £1,814 per mile; and that from Parkes to

Condobolin, £1,868 per mile. In connection with the Culcairn-Co line, which averaged £4,446 per mile, the betterment system brought into operation. The Campbelltown to Camden, the Kog to Sans Souci, and the Yass lines were constructed cheaply for th lines :—

Lines opened for Traffic.	Length.		Total Cost.	Cost per Mile.
	m.	ch.	£	£
Darling Harbour Branch	1	42½	363,106	237,130
Sydney to Granville	13	36¼	1,895,831	140,921
Granville to Goulburn	121	5¾	2,584,259	21,345
Goulburn to Wagga	174	79¼	1,548,540	8,849
Wagga to Wodonga	79	13¾	915,115	11,559
Junee to Hay	167	35¾	969,979	5,793
Narrandera to Jerilderie	64	54¾	409,435	6,330
Granville to Penrith	21	26¼	609,220	28,564
Penrith to Bathurst	109	27	2,447,417	22,384
Bathurst to Dubbo	134	5	1,228,427	9,163
Dubbo to Bourke....................	225	45	1,347,500	5,974
Wallerawang to Mudgee	85	06	981,405	11,536
Blacktown to Richmond	16	12	176,487	10,928
Goulburn to Cooma................	130	40	1,403,346	10,754
Cootamundra to Gundagai.........	33	45½	270,008	8,043
Orange to Molong	22	60	269,821	11,860
Murrumburrah to Blayney	110	63	1,080,469	9,753
Sydney to Kiama	71	53	1,953,332	27,257
Homebush to Waratah	93	03	2,640,996	28,386
Newcastle to Wallangarra.........	392	54	4,993,188	12,716
Werris Creek to Narrabri	96	48	567,433	5,874
Bullock Island Branch	1	45¼	89,860	57,282
Morpeth Branch	3	37½	60,849	17,542
Hornsby to Milson's Point.........	13	27½	598,844	44,878
Campbelltown to Camden...	7	65	39,201	5,018
Kogarah to Sans Souci	4	71	12,111	2,478
Kiama to Nowra	22	43½	363,318	16,116
Lismore to Murwillumbah.........	63	57	883,615	13,869
Sydenham to Belmore	5	3½	187,326	37,140
Culcairn to Corowa.	47	39	211,101	4,446
Nyngan to Cobar.	81	27¼	302,211	3,715
Cootamundra to Temora	38	69	167,664	4,314
Molong to Forbes	72	69	387,714	5,321
Yass Tramway.	2	73	28,339	9,730
Jerilderie to Berrigan	21	65	39,563	1,814
Parkes to Condobolin	62	60½	117,224	1,868
Narrabri to Moree	63	10	138,886	2,200
Nevertire to Warren	12	33¼	24,669	1,987
Total or average ...	2,691	32¼	32,307,809	12,004

The amount expended on rolling-stock to the 30th June, 189 £4,476,097 ; for machinery, £293,651 ; on workshops, £631,864 for furniture, £9,981 ; or £5,411,593 in all. This makes the tota

ines open for traffic, £37,719,402, or an average of £14,015 per
The growth of the capital expenditure on open lines may be
elow :—

Year.	Capital expended on lines open.	Year.	Capital expended on lines open.
	£		£
1855	515,347	1889	29,839,167
1860	1,422,672	1890	30,555,123
1865	2,746,373	1891	31,768,617
1870	5,566,092	1892	33,312,608
1875	7,245,379	1893	34,657,571
1880	11,778,819	1894	35,855,271
1885	21,831,276	1895	36,611,366
1886	24,071,454	1896	36,852,194
1887	26,532,122	1897	37,369,205
1888	27,722,748	1898	37,719,402

cost of the lines open for traffic on the 30th June, 1898, as
stated, was £37,719,402. Of this amount, £903,565 has
rovided from the Consolidated Revenue of the colony, and
ures to the amount of £1,902,975 have been finally paid off,
a balance of £34,912,862 which has been raised by the issue
ntures and other stock. As will be seen hereafter, the net
s for the year ended June, 1898, after paying working expenses,
,412,143, which gave a return of 3·74 per cent. upon the total
expenditure on lines open for traffic, and 4·04 per cent. upon the
on which the country has to pay interest. The so-called reduction
railway debt is purely imaginary, seeing that the bulk of the
ures retired were renewed out of fresh loans, and the sum paid
evenue to redeem loans was not furnished by railway profits.
oper comparison between railway earnings and interest charged
ned from the net earnings of railways on cost of construction,
e actual interest paid by the State on outstanding loans. The net
s of the railways represent 3·74 per cent. on the cost of construc-
but as the average price obtained for the loans of the colony
·37 per £100 of stock, the actual earnings of the railways cannot
n at more than 3·60 per cent., while the interest charged on

outstanding loans is 3·63 per cent. Another point to be consid is that the sum of £1,000,000 was authorised by Parliament t expended in connection with the improvements to the grades on m lines, and the quadrupling of the suburban system. The cost of th urgent works was to be defrayed from the proceeds of loans, on understanding that the loans should be redeemed from railway reve at the rate of £75,000 a year, and already £525,000 has been nomin redeemed. This redemption has been effected at the expense of general revenue, seeing that in the years when the redemption made there was not sufficient railway revenue to meet working expe and interest, and there has, therefore, really been no reduction of ca effected by these payments.

The cost of railway construction in the principal countries of world for which figures are available, is given hereunder. The fig include the whole expense of equipping the lines for traffic, and brought down to the latest available dates:—

Countries.	Cost per Mile open for Traffic.	Countries.	Cost per Mile open for Traffic.
	£		£
United Kingdom	50,845	Australasia:—	
France	27,568	New South Wales...	14,015
Germany	20,317	Victoria	12,404
Switzerland	20,207	Queensland	6,850
Norway	7,428	South Australia......	7,405
Sweden	5,918	Western Australia	5,088
Canada	11,367	Tasmania..	8,302
United States	11,626	New Zealand	7,783
Cape Colony	10,165		

NEW LINES AND REVENUE RETURNS.

The contrast between the present condition of the New South W railways and their humble beginning in 1855 is a remarkable one. 1856, the first year which can fairly be taken for purposes of compari the number of passengers on the railways was only 350,724, w the year ended June 30, 1898, the number was 23,233,206, or more an 66 times greater. But the tonnage of goods carried represents a very uch larger increase, having grown from 2,469 to 4,630,564—the traffic ving expanded to nearly 1,875 times its original volume since the st full year of railway operations. For the first ten years of the riod under review the larger part of the railway earnings was obtained om the passenger traffic, no doubt owing to the fact that the first ilways were almost entirely suburban. It was not until the line ossed the mountains and opened up the far interior that the proportions anged, and the goods traffic became the principal source of revenue of e railways. This change began to take place in 1867.

The comparison between the earnings of the period prior to 1871—hen the net result every year represented only a small portion of the terest due on the capital expended in the construction of the lines—nd of the subsequent period, affords matter for satisfaction. The figures r 1886 and 1887 show a falling-off from those of the previous fourteen ears; but it should be borne in mind in comparing these two years ith the excellent results exhibited during the period from 1874 to 1884, hen an average of considerably over 4 per cent. was realised, that the ll in receipts was due in a great measure to the previous years of ought.

During the years 1884 and 1885 the last section of the main western ne, extending over a distance of 112 miles as far as Bourke, was pened, and the line branching off from Wallerawang was completed as r as Mudgee, the length being 85 miles. On the south-western railway he branch line, Narrandera to Jerilderie, covering a distance of 65 iles, was opened for traffic. All these extensions run through very parsely settled districts, and this was the case with regard to nearly he whole of the other 172 miles opened during the two years mentioned. This total of 412 miles opened for traffic in unproductive country used a serious falling-off in the proportion of receipts to expenditure uring the period ended June, 1888, the net revenue yielding less than 3 per cent. on the total expenditure. Since that time, despite the ddition of further unprofitable lines to the system, the returns have mproved step by step, rising in the years 1891 and 1892 to 3·59 and 3·58 per cent., and during the four years of depression ended 1896 never falling below 3·44 per cent., while in 1897 and 1898 returns of 3·79 and 3·74 per cent. were obtained. As will be seen farther on, the burden of nprofitable lines continues to be heavy, the loss on 1,257 miles during he years ended 31st December, 1896 and 1897, being no less than £357,093 and £349,214 respectively; but the expenses of working are ept as low as possible. The fact that the lines as a whole have not in he past returned a profit should occasion no surprise, as the statistics f railways in all parts of the world show that few lines, except perhaps uburban ones, return anything like a profit during the first few years fter their opening. In England a period of seven years has been allowed y good authorities for a line to develop traffic; and if such is the fact

in more densely-populated countries, whose resources are more de
than is the case in New South Wales, there is every reason to be s
with the fact that the lines of this colony have yielded so good a
as they have.

A glance at the table showing the net earnings and the inte
the capital expended upon railways, which will be found on pa
will disclose the fact that during the period from 1870 to 1875
the length of new lines yearly constructed was very small, being o
miles during the whole period of six years, or about 19½ mi
year, the railway profits steadily increased from 1·81 to 4·39 pe
During 1877 and 1878, 180 miles of railway were constructed, a
profits immediately declined to 3·74 and 3·34 per cent. respe
From 1880 to 1884 the railways were extended chiefly to
already populous and prosperous, viz., Riverina and New E
and the central districts of Wellington and Dubbo; and a
were years of remarkable prosperity, the railway profits suffer
than usual from the considerable extension, which included t
struction of the expensive connecting-link joining the New
Wales railways with those of Victoria, at the river Murray.
1885 the extensions on the main lines have, for the most par
through pastoral country, such as the continuation of the weste
to Bourke, the northern line to Jennings, and the further ext
of the lines in the Goulburn district to the rich pastoral la
Monaro; while several branch lines were constructed tapping im
agricultural and dairy-farming districts, notably the lines Coota
to Gundagai, Cootamundra to Temora, Murrumburrah to B
Nyngan to Cobar, Culcairn to Corowa, and Sydney to Nowra. N
the lines mentioned yet pays its way, the loss on some being very
There was also constructed an isolated line, 61 miles in lengt
Lismore to Murwillumbah, which likewise shows a heavy loss on w
In some cases the value of the branch lines will not be felt u
entire system of which they form part is completed, or until they
trunk lines. For instance, in the case of the Goulburn to Cooma
proposal has been under consideration for continuing this line
Victorian border, with a branch line to Eden, Twofold Bay.
expected that the Gippsland line will be extended from Bairns
the border, and that by the junction of these two lines an alte
route to Melbourne will be obtained. In that case, no doub
eastern part of Gippsland would find its natural port at Eden. Ex
new lines result in an increase of the percentage of working exp
the gross earnings, as these lines have to be kept in full workin
and repair whilst actually returning in gross earnings little mor
the cost of maintenance. The small returns on expensive incom
branches further tend to diminish greatly the profits of a r
system taken as a whole; but such is the history of railway constr
in all parts of the world, and New South Wales is no exception
general rule.

following table shows the loss on non-paying lines during the ur calendar years. It should be noted that the capital cost s the expenditure on equipment as well as construction :—

Line.	Length.		Capital Cost.	Loss in Working, after providing for Working Expenses and Interest.			
				1894.	1895.	1896.	1897.
	mls.	ch.	£	£	£	£	£
n to Cooma	130	40	1,462,361	43,096	43,453	47,525	42,047
lburrah to Blayney	110	63	1,143,249	37,586	40,855	42,172	40,555
andra to Gundagai	33	45	276,364	6,474	5,628	6,168	5,083
undra to Temora	38	69	192,761	1,943	3,137	2,159	3,519
o Hay	167	36	1,049,772	17,563	Nil.	8,494	16,852
lera to Jerilderie	64	55	424,234	14,305	10,701	12,011	10,841
to Corowa	47	39	232,752	8,023	7,925	7,118	7,323
to Kiama	71	53	2,185,744	41,091	42,204	33,909	37,631
to Nowra	22	43	380,794	12,968	12,634	11,974	12,504
am to Belmore	5	3	201,983	......*	†7,518	8,119	7,923
wn to Richmond	16	12	197,506	5,116	6,091	5,256	5,074
wang to Mudgee	85	6	1,043,287	28,514	29,704	27,242	26,671
to Molong, Parkes Forbes	95	49	717,225	5,978	5,881	2,162	4,000
to Cobar	81	27	324,334	3,588	2,184	2,885	1,392
y to Milson's Point	13	28	616,904	20,183	20,184	14,721	14,602
rth to Armidale	76	76	1,214,546	31,786	34,907	34,207	28,433
le to Jennings	132	43	1,539,946	63,847	64,683	62,819	56,366
to Murwillumbah	63	57	920,717	†11,695	32,018	28,152	28,398
Total	1,257	24	14,124,479	353,756	369,707	357,093	349,214

* Not opened. † Opened for part of the year only.

Railway Commissioners in their annual report for 1891 suggested f paying for new lines from the sale of lands. They recommended e Crown lands for a distance of 10 miles on each side of a proposed railway should be set aside for sale, and half the proceeds of the ld credited to the railway capital ; and where the land required way construction had passed into the hands of private individuals, d-owners should combine and convey the necessary land free of the Government, it being considered that the owners would be emunerated for the gift of the land by the enhanced value of their ty caused by the establishment of direct railway communication he other parts of the colony. By the adoption of such a as this it is believed that railways in light undulating country be constructed at a moderate cost, and yield a fair return on from the commencement, especially what are known as "Pioneer ays," which could be constructed at an average of about £1,750 le, exclusive of bridges.

betterment system as applied to railways was first introduced construction of the Culcairn to Corowa Railway. No special

NET EARNINGS AND INTEREST ON CAPITAL.

The net revenue for the year which expired on the 30th June, was £1,412,143, while the total amount of capital expended on li operation to the same period was £37,719,402. The net return capital expended equalled 3·74 per cent., which is 0·10 per cent. the average interest payable on the public debt, and only 0·04 pe below, if the actual price received for stock be taken. The foll table shows the net earnings and the interest returned on the capital expended on railways, including the cost of both constr and equipment, for the year 1855 and subsequent periods :—

Year.	Net Earnings.	Interest on Capital.	Year.	Net Earnings.	Inte Ca
	£	per cent.		£	per
1855	3,290	0·63	1889	903,875	3
1860	11,842	0·83	1890	967,251	3
1865	57,106	2·07	1891	1,143,050	3
1870	101,139	1·81	1892	1,193,044	3
1875	318,474	4·39	1893	1,188,540	3
1880	513,298	4·35	1894	1,221,699	3
1885	716,215	3·37	1895	1,310,615	3
1886	667,078	2·90	1896	1,268,529	3
1887	750,535	2·96	1897	1,413,524	3
1888	764,573	2·85	1898	1,412,143	3

Two important facts which demonstrate the financial position railways and the character of the management are the earnin train mile and per average mile open. Although the returns now realised cannot be compared with those of 1875, when the net ea per train mile fell little short of 52d., and per mile open £7 present earnings are in every way encouraging. Under the of the Commissioners the net return per train mile has increase 27·4d. to 40·6d., or 48·2 per cent.; while per mile of line open for dvance has been from £374 to £531·1, or 42·0 per cent. The ring table gives details of the net earnings since 1860 :—

Year.	Net Earnings per—		Year.	Net Earnings per—	
	Train Mile.	Mile Open.		Train Mile.	Mile Open.
	d.	£		d.	£
1860	15·9	189·5	1890	29·0	444·3
1865	28·3	399·3	1891	32·6	523·8
1870	26·9	307·4	1892	34·3	546·6
1875	51·9	774·8	1893	38·0	513·2
1880	38·0	653·1	1894	40·9	503·3
1885	25·9	430·6	1895	41·4	520·9
1886	24·7	372·6	1896	39·5	501·2
1887	27·8	387·7	1897	41·7	549·0
1888	27·4	374·0	1898	40·6	531·1
1889	28·4	424·7			

PASSENGER TRAFFIC.

e number of journeys made by each person in the colony now ges 17·6 per annum, as against 7·5 in 1880 and 1·6 in 1870. The ase has been exceedingly rapid as well as fairly uniform, as will be from the following table :—

Year.	Number of Journeys	Year.	Number of Journeys.
1855	0·4	1889	15·3
1860	1·6	1890	15·8
1865	1·9	1891	17·0
1870	1·6	1892	17·1
1875	2·3	1893	16·6
1880	7·5	1894	15·7
1885	14·6	1895	15·8
1886	15·4	1896	16·3
1887	14·4	1897	17·2
1888	14·9	1898	17·6

e figures just given include journeys of season ticket-holders ; ding this traffic, the number of journeys per head would be about The average number of journeys made by the inhabitants of United Kingdom is 25·9, and of Western Australia and Victoria, and 36·6 respectively—figures which largely exceed those of any population. The averages of some of the other important countries olonies are :—Belgium, 17·6 ; France, 9·4 ; Germany, 11·3; United

States, 7·3 ; Austria-Hungary, 3·9 ; Norway, 3·5 ; Sweden. Switzerland, 16·7 ; Netherlands, 5·5 ; Spain, 1·9 ; South Australia. Queensland, 5·7; New Zealand, 6·4 ; and Tasmania, 3·5. The number of journeys made by passengers, including season ticket-hol the revenue received from the coaching traffic, and the average rec per journey, are shown in the next table, which should be rea conjunction with that just given : -

Year.	Passenger journeys.	Receipts from Coaching Traffic.	Average Receipts per journey.
	No.	£	d.
1855	98,846	9,093	22·06
1860	551,044	45,428	19·79
1865	751,587	92,984	29·69
1870	776,707	117,854	36·42
1875	1,288,225	205,941	38·37
1880	5,440,138	390,149	17·21
1885	13,506,346	830,904	14·76
1886	14,881,604	849,253	13·70
1887	14,451,303	850,499	14·12
1888	15,174,115	918,975	14·53
1889	16,086,223	1,025,601	15·30
1890	17,071,945	1,059,791	14·90
1891	19,037,760	1,177,037	14·84
1892	19,918,916	1,189,231	14·33
1893	19,932,703	1,115,042	13·43
1894	19,265,732	1,047,029	13·04
1895	19,725,418	1,022,901	12·45
1896	21,005,048	1,043,922	11·93
1897	22,672,924	1,098,696	11·63
1898	23,233,206	1,126,257	11·63

It will be seen that 1897 and 1898 show far larger numbers of pa ger journeys than preceding years, but less satisfactory results i way of average receipts per journey. This does not so much arise curtailment of long-distance travelling as from the change of a body of travellers from first to second class—a result due to dimin means, and doubtless to some extent to the more comfortable carr now provided for second-class passengers. A return to prosp times should show an increase in first-class travellers, but it frequ happens that the removal of the original impelling cause is not foll by a return to previous habits, so that the railways may not altog recover the revenue lost by the change on the part of the trave public. In 1898 the receipts from first-class passengers, incl of season tickets, amounted to £308,893, and from second-class pa gers, £621,837, showing an increase on the previous year of £2,04 £19,431 respectively.

The traffic on the suburban lines, which comprise only distances w 22 miles of Sydney and Newcastle, Liverpool and Morpeth include enormously increased of late years. In the following table a compa ituted between the traffic for the years ended 30th June, 1888, and 1898:—

Suburban Traffic.	1888.	1897.	1898.
r of ordinary passengers	7,413,868	11,323,539	11,392,304
workmen's journeys	1,738,284	4,000,248	4,293,168
season ticket holders' journeys	3,227,760	4,827,560	4,973,572
l passenger journeys	12,379,912	20,151,347	20,659,044
r of miles travelled	70,172,793	115,059,631	118,653,210
e mileage per passenger	5·67	5·71	5·74
t received from passengers	£186,393	£264,392	£261,333
e receipts per mile, per passenger	0·64d.	0·55d.	0·53d.

average receipts from passenger traffic per head of population ced very rapidly until 1891, when the amount stood at 20s. 11·8d., it 10s. 8·5d. in 1880, and 4s. 9·7d. in 1870. This was not due ch to the increased distance travelled by passengers as to the fact he railway mileage increased at a greater rate than the population, ng the public to indulge in a larger measure of railway travelling, ordance with the well-established rule that the more the facilities velling are extended the greater will be the traffic. Since 1891 the e has lessened and now stands at 16s. 5·3d. In this connection y be interesting to note that the fares charged on the suburban over which the majority of passengers travel, are very much less th classes of travellers than the English rates, although the cost of ng is very much higher. The receipts from passenger traffic on iburban lines per head of the population will be found in the fol- figures:—

Year.	Amount per head.	Year.	Amount per head.
	s. d.		s. d.
1860	2 7·8	1890	19 7·1
1865	4 7·8	1891	20 11·8
1870	4 9·7	1892	20 4·9
1875	7 10·2	1893	18 7·4
1880	10 8·5	1894	17 1·4
1885	17 11·1	1895	16 4·2
1886	17 6·2	1896	16 4·1
1887	16 11·1	1897	16 11·2
1888	18 0·2	1898	16 5·3
1889	19 6·2		

GOODS TRAFFIC.

The weight of goods and live stock carried per head of pop New South Wales compares favourably with that of many where railways have long been established. The average in 1860 and subsequent periods was:—

Year	Tons.	Year.	Tons.
1860	0·2	1890	3·5
1865	1·2	1891	3·4
1870	1·6	1892	3·7
1875	2·2	1893	3·2
1880	2·4	1894	2·9
1885	3·5	1895	3·3
1886	3·3	1896	3·1
1887	3·3	1897	3·5
1888	3·3	1898	3·5
1889	3·3		

The largest amount of tonnage per inhabitant is carried i States, where it averages 10·5; and the United Kingdo with 9·4 tons. The relative position of New South Wales from the next table, which shows the tonnage of merchandi head of population in the principal countries of the world:-

	Tons.		
United States	10·5	Russia	
United Kingdom	9·4	Portugal	
Belgium	8·3	Japan	
Germany	4·7	Australasia—	
Canada	4·9	New South Wales	
Switzerland	4·2	Victoria	
Austria-Hungary	3·3	Queensland	
Sweden	3·0	South Australia	
France	2·7	Western Australia	
Netherlands	2·2	Tasmania	
Norway	0·9	New Zealand	

following figures, which extend as far back as the first opening ines, show how greatly the goods traffic has expanded, especially nt years:—

Year.	Tonnage of Goods and Live Stock.	Earnings.	Year.	Tonnage of Goods and Live Stock.	Earnings.
		£			£
1855	140	156	1889	3,485,839	1,512,876
1860	55,394	16,841	1890	3,788,950	1,573,295
1865	416,707	73,048	1891	3,802,849	1,797,384
1870	766,523	189,288	1892	4,296,713	1,918,065
1875	1,171,354	408,707	1893	3,773,843	1,812,014
1880	1,712,971	770,868	1894	3,493,919	1,766,512
1885	3,273,004	1,343,464	1895	4,075,093	1,855,303
1886	3,218,582	1,310,817	1896	3,953,575	1,776,495
1887	3,339,253	1,357,796	1897	4,567,041	1,916,046
1888	3,399,772	1,376,149	1898	4,630,564	1,900,491

s unfortunately impossible to subdivide the tonnage of goods ve stock given for 1897–8 into anything approaching a general cation, but this can be done for the year which closed with December, In the subjoined statement, which relates to the year in question, found particulars of the tonnage under eight broad classes, the e distance goods of each class were carried, and the average gs per ton per mile. This last figure, however, does not include minal charges, which would probably increase the revenue per ton le by about ·20d., or from 1·44d. to 1·64d. The "Miscellaneous class" comprises timber, lime, manures, fruit, vegetables, hides, o leaf, bricks, gravel, drain-pipes, and traffic of a similar nature.

Description of Traffic.	Tons carried.	Average number of miles each ton of traffic is carried.	Earnings per ton per mile.
	2,873,737	15·42	0·62d.
od	187,299	26·59	0·84d.
flour, etc.	258,550	154·30	0·61d.
traw, and chaff	105,150	168·99	0·39d.
laneous and "A" class	316,648	74·72	0·91d.
	100,003	273·32	2·27d.
tock	177,448	268·17	1·64d.
er goods	543,108	124·96	2·25d.
	4,561,943	59·93	1·38d.
Terminal charges	....	....	0·20d.
Total	4,561,943	59·93	1·58d.

he statement which is given below shows the receipts for carrying ds one mile along the lines of the colony. The information reaches back to 1872, when the charge was 3·6d., while after an interval twenty-three years it had fallen to 1·6d. The decrease, however, i some extent more apparent than real, inasmuch as it represents a extensive development of the mineral trade than of the carriage of ge merchandise; but when due allowance has been made on this acco will be found that the benefit to the general producer and consumer been very substantial:—

1872	3·6d.	1884	1·9d.
1873	3·3d.	1885	1·9d.
1874	3·0d.	1886	1·8d.
1875	3·1d.	1887	1·8d.
1876	2·8d.	1891	1·9d.
1877	2·7d.	1892	1·8d.
1878	2·4d.	1893	1·8d.
1879	2·3d.	1894	1·8d.
1880	2·3d.	1895	1·6d.
1881	2·3d.	1896	1·6d.
1882	2·1d.	1897	1·6d.
1883	2·0d.		

The figures just given should not be too strongly relied upo comparing one year with another; but they may safely be take indicating generally the lessened cost of carriage to persons forwar goods by rail. The reduction is most noticeable in regard to agricult produce and live stock.

During the year ended 30th June, 1895, some important reduct were made in the rates for the conveyance of goods and live stock. rates for cattle were lowered to the scale of charges applicable to sh this being practically a reduction of 20 per cent. In March, a gen revision of the goods classification was made, by which many arti were placed in lower classes. The rates for coal in the New- district, and from the western mines to Sydney and district, were slightly reduced. By a revision of the wool tariff, the anomaly charging higher rates from stations nearer to Sydney and Newca than from others at longer distances on the same line, but wh are affected by the interior river and other competition, was enti removed. In April, 1896, a general reclassification of goods came i force, by which a large number of articles were reduced to lo classes. Further reductions were made at the same time in the ra for the carriage of agricultural produce over long distances. The ra for agricultural implements forwarded in 5-ton truck loads w reduced by 50 per cent. and for small consignments by 20 per c To assist the mining industry, the rates for explosives and min machinery were also reduced, the latter by 50 per cent.

The introduction of "Starving stock rates" on the Governm Railways became necessary last year on account of the disastrous ef of the drought. These rates permitted a reduction of 50 per c on the ordinary charges from the drought-stricken districts to pl where feed and water were obtainable. Stock of which a forced

nade by reason of the necessity for removal to another district for
were treated in like manner. Where travelling stock routes could
e used, and store stock required transit by railway, a reduction
i per cent. on usual rates was allowed on carriage for distances not
han 100 miles. A similar reduction in the freight of fodder for
ing stock was also made.

e revenue from goods and live stock traffic per head of population rose
ly from the opening of the lines until the year 1883, when it stood
s. 4d., at which figure it remained in 1884. The unfavourable seasons
ienced during the subsequent years greatly affected the traffic, and
evenue in 1888 had fallen to 27s. per inhabitant. For a number
rs afterwards there was a steady increase, and in 1892 the amount
at 32s. 11d.—the highest figure yet attained; in 1894 this had
ased to 28s. 10d., but in 1895 the amount rose to 29s. 7d. In
, owing chiefly to the diminished wool traffic, and partly also
Newcastle strike, the amount fell to 27s. 10d.; in 1897 the
nt rose to 29s. 7d.; but the effect of the drought was noticeable
898, when the average per head dropped to 28s. 8d. The results
ed must be regarded as very satisfactory, especially in face of the
al reduction in the freights:—

Year.	Amount.	Year.	Amount.
	£ s. d.		£ s. d.
1860	0 0 11·8	1890	1 9 1·0
1865	0 3 7·8	1891	1 12 0·5
1870	0 7 8·7	1892	1 12 11·0
1875	0 13 11·8	1893	1 10 3·1
1880	1 1 1·9	1894	1 8 10·6
1885	1 8 11·7	1895	1 9 7·8
1886	1 7 0·5	1896	1 7 9·6
1887	1 7 0·3	1897	1 9 7·1
1888	1 6 11·7	1898	1 8 8·6
1889	1 8 9·4		

e rolling stock of the New South Wales railways, on the 30th
, 1898, consisted of 494 engines, 419 tenders, 1,050 coaching stock,
goods vehicles, and 1,041 stock for departmental use only, making
tal of 12,433 stock. These figures represent an increase of 21
ning stock, but a decrease of 8 locomotives, and 1 tender, 7 depart-
tal stock, and 26 merchandise stock, from the figures for the
ious year. Despite these decreases, however, the total traction
r and carrying capacity have been increased. The number of
e miles run was 11,908,461, while the train miles numbered only
,338. The fitting of the goods stock with the Westinghouse
-acting freight brake appliances was almost completed in 1897-8,
much progress was made with the work of interlocking of points
signals.

During the year ended June, 1898, the wages paid by the Ra
Department amounted to £1,113,190 as against £1,092,511 i
previous year. Of the former sum, the Maintenance Branch
£364,656, and the Locomotive Branch £502,279, while the T
Branch absorbed £246,255. Additions to stations, buildings, etc
rolling stock and additional appliances, including continuous brake
£103,183, which was charged to capital account.

Compensation for personal injury was paid during the twelve m
to the amount of £1,250, and for damage to and loss of goods, £
The maximum amount recoverable from the Railway Commission
connection with injuries sustained by any one person has been li
by the Government Railways Compensation Act, 1896, to £2,00

The cost of fuel is, naturally, a large item in the railway acc
For the last working year the expenditure on coal, coke, and
totalled £70,771. The coal consumed on the locomotives amoun
295,107 tons, or an average of ·50 cwt. per engine mile.

There were altogether 10,574 persons employed on the railw
the 30th June, 1898, of which number 1,213 comprised the salarie
and 9,361 were on wages. For the previous year the total numb
10,357, of whom 1,220 were on salary and 9,137 on wages.

The management of the State railways of New South Wales
the hands of a single Commissioner, under the Secretary for
Works, up to the month of October, 1888. At that date the s
was transferred to the department of the Colonial Treasurer, an
actual administration of the railways was entrusted to three Co
sioners, to whom were given very extensive powers, amounting i
to almost independent control. The change was made with the
of securing economic management of the lines, free from po
interference.

PRIVATE RAILWAY LINES.

In New South Wales the established policy has hitherto been to
the railways under State management and control, and at the p
time there are only four private lines in operation, with the exc
of short lines to connect coal-mines with the main railways, etc.
Parliament granted permission to a company to construct a line
Deniliquin, in the centre of the Riverina district, to Moama, o
Murray, where it meets the railway system of Victoria. A consid
proportion of the wool and other produce of Riverina reache
Melbourne market by this route. The line, which was opened i
year 1876, is 45 miles in length, and was constructed under a s
Act of Parliament, assented to on the 3rd March, 1874. The
required was granted by the New South Wales Government, right
reserved for the purchase of the line at any time after twenty-one
from the passing of the Act. The total capital expended is £16
£40,000 of which was raised by debentures—£30,500 now outstand
and there is a reserve fund of £11,187. The dividends formerl

ged 10 per cent., but the latest dividend declared was at the rate per cent. per annum. During the year 1888 a line, 35 miles 54 s in length, was laid down from the Barrier silver mines, Silverton, Broken Hill to the South Australian border. The total capital ıded is £345,589, of which £80,000 was raised by debentures, and is a reserve fund of £40,000. The line since its inception has large support. In 1891 the large dividend of 70 per cent. was red. The latest dividend declared was at the rate of 40 per cent. aid-up capital. A short line connects Clyde with the Rosehill course, and another joins Liverpool with the Warwick Farm Racee. The following table shows the operations of these lines during 'ear 1897:—

Name.	Line.				Total Capital Expended.	Reserve Fund.	Debentures Outstanding.	Passengers Carried.	Goods Carried.	Live Stock Carried.	Train Miles Run.
	Length.		Gauge.								
	m.	ch.	ft.	in.	£	£	£	No.	tons.	No.	No.
ıuin and Moama	45	0	5	3	162,672	14,187	30,500	11,821	17,963	133,280	60,466
on	35	54	3	6	345,589	40,000	Nil.	47,579	518,050	79,918	137,207
to Rosehill ..	3	0	4	8½	48,000	Nil.	Nil.	15,692	1,701	551	226
ck Farm ..	0	60	4	8½	5,700	..	..	12,314	Nil.	558	16

ıe Deniliquin and Moama Company possesses 4 locomotives, 6 'nger carriages, and 63 goods carriages and vans; and the Silverton pany has 15 locomotives, 16 passenger carriages, and 650 goods :les. On the Rosehill and Warwick Farm lines Government rolling- : is used.

uthority was obtained during 1893 for the construction of two ıte lines, namely, from Menindie to Broken Hill, in the Western ict, and from Rosehill to Dural (Simpson's), in the Parramatta ict. Three miles 28 chains of the latter line have been constructed. not yet opened for traffic.

RAILWAY ACCIDENTS.

ıe railways of the colony have been as free from accidents of a ıus character as the lines of most other countries. In order to obtain nmon basis of comparison it is usual to find the proportion which the ber of persons killed or injured bears to the total passengers carried. 'e is, however, no necessary connection between the two, for it is ous that accidents may occur on lines chiefly devoted to goods traffic, a more reasonable basis would be the accidents to passengers only ɔared with the number of passengers carried. The data from which a comparison could be made are wanting for some countries; as ɪ the figures can be given, however, they are shown in the following ', which exhibits the number of passengers killed and injured per million persons carried. The figures are brought down to the l possible dates :—

Countries.	Accidents per million passengers carried		Countries.	Accidents per passengers ca	
	Killed.	Injured.		Killed.	I
Germany	0·1	0·4	Russia in Europe ...	0·6	
Austria-Hungary	0·1	1·2	United Kingdom ...	0·1	
Belgium	0·1	1·8	Spain	0·8	
Sweden	0·1	0·2	Japan	0·1	
France	0·2	0·7	Canada	0·4	
Italy	0·1	2·8	New South Wales ..	0·1	
Norway	0·1	Nil.	Victoria	0·02	
Holland	Nil.	0·9	South Australia	0·3	
Switzerland	0·2	0·9	New Zealand	0·9	

The above mode of comparison is not, however, a perfect one question of the distance travelled by each passenger is an imp element of the risk run, and is omitted from consideration. If thi made a factor of the comparative statement, it would probably be that the risk of each traveller by rail would show less variation i different countries than would seem to be the case from the figur given.

The persons meeting with accidents on railway lines may be gr under three heads—passengers, employees, and trespassers; an accidents themselves may be classified into those arising from beyond the control of the person injured, and those due to misco or want of caution. Adopting these classifications, the accidents New South Wales Government Railways during the year ende 30th June, 1898, were as follow:

Accidents arising	Passengers.		Employees.		Trespassers, etc.		Tot	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	I
From causes beyond their control	...	7	2	2	...	...	2	
Through misconduct or want of caution. .	3	26	7	71	17	6	27	
Total	3	33	9	73	17	6	29	

The returns of the railways of the United Kingdom show that d the year 1897 the number of persons killed was 1,165, and of p injured, 6,102. The passengers killed and injured numbered 13 1,639 respectively, or 0·1 and 1·6 per million passengers carried railway employees were killed, and 1,129 were injured; there we cases of suicide: and the other persons killed and injured were passers and persons who were crossing the lines.

a the following statement particulars regarding accidents on the
ernment Railways of New South Wales are given for ten years:—

Year ended 30th June.	Passengers.		Employees.		Trespassers, etc.		Total.	
	Killed.	Injured	Killed.	Injured	Killed.	Injured	Killed.	Injured
1889	3	38	16	27	12	9	31	74
1890	6	53	22	103	27	20	55	176
1891	7	42	32	114	21	14	60	170
1892	17	58	26	163	7	7	50	228
1893	7	47	10	87	11	5	28	139
1894	8	33	7	93	13	18	28	144
1895	16	77	17	70	9	13	42	160
1896	5	27	9	83	11	8	25	118
1897	2	50	8	78	15	7	25	135
1898	3	33	9	73	17	6	29	112
Total	74	458	156	891	143	107	373	1,456

TRAMWAYS.

e tramways, like the railways, are the property of the Government,
are under the control of the Commissioners for Railways. There
in June, 1898, five distinct systems of tramways in operation,
sting of the Metropolitan and the Ashfield to Enfield lines,
uring together 42 miles 23 chains; the North Shore cable tramway,
e 31 chains: the North Shore electric lines, 6 miles 75 chains; the
-street to Ocean-street cable tramway, 2 miles 32 chains; and the
astle to Plattsburg Tramway (including Merewether and Tighe's
sections), 12 miles 1 chain: giving a total of 65 miles 2 chains of
in use.

e metropolitan tramways may fairly be regarded as street rail-
, and they are worked by locomotives of a special construction.
ble tramway was inaugurated at North Sydney some years ago;
line of a similar class, extending from the heart of Sydney to the
rb of Woollahra, *via* William-street, was completed in 1894, and
ed on the 19th September in that year. The electric system has not
een introduced into the city, but for some years has been in opera-
at North Sydney, where electrical tramways connect Willoughby
Mosman with the terminus of the cable tramway. The electrical
m has also been brought into operation in an extension of
able tram at Woollahra to Rose Bay. An Act was passed
896 for the construction of an electric tramway from Circular
, along George-street, to the Redfern Railway Station and to
opulous district of Pyrmont. This line, known as the George-
t–Harris-street tramway, is a double track, and measures in
h 3 miles 20 chains. It will be opened at an early date. A

scheme for the conversion of the whole of the steam tramways metropolitan district into an electrical system has been adopt provision for the electrical power required has been made at t works at Ultimo, now approaching completion. A vote of £1 has already been granted by Parliament for the purpose of con and the Railway Commissioners are now making all necessary p tions for the change. Within the next few years it is expect the whole of the tramways of Sydney and suburbs will be dri electricity.

The net return on tramway capital has varied greatly from year. The favourable results of the first four years encoura belief that the metropolitan tramways would prove a source of i to the general revenue of the colony; but these anticipations w realised during the next seven years, and it was not until 1890 t net earnings exceeded the rate of interest payable on the borrowed for the construction of these works. The followin gives some interesting particulars respecting the metropolitar ways, exclusive of the King-street to Ocean-street cable tramw North Shore cable and electric tramways, and the Ashfield to tramway. In the year 1879 the tramways were open for only th a half months, and for part of that time were worked by horse The accounts since 1887, like those relating to the railways, ha made up to the 30th June in each year:—

Year.	Length of Line.	Tram Mileage.	Total Earnings.	Working Expenses.	Earnings per Tram Mile.	Working cost per Tram Mile.	Proportion of working cost to gross earnings.	Net Earnings.	Capital spent on Lines open.
	miles.		£	£	d.	d.	p. cent.	£	£
1879	1½	13,270	4,416	2,278	79·87	41·19	51·59	2,138	22,20
1880	4	84,074	18,980	13,444	54·18	38·38	70·83	5,536	60,21
1881	9¾	296,906	62,549	52,107	50·56	42·12	83·31	10,442	169,450
1882	22	670,649	126,202	103,136	45·16	36·91	81·72	23,066	412,561
1883	25	1,076,096	190,699	178,877	42·53	39·89	93·80	11,822	544,10
1884	27½	1,242,491	219,942	215,167	42·48	41·56	97·83	4,775	643,111
1885	27½	1,220,500	223,340	207,995	43·91	40·90	93·13	15,345	708,10
1886	27½	1,222,943	226,367	201,737	44·42	39·59	89·12	24,630	742,11
1887	29½	1,220,026	214,125	201,468	42·12	39·63	94·08	12,657	731,5
1888	29¾	1,246,543	221,060	204,227	42·56	39·32	92·38	16,833	742,55
1889	29¾	1,338,396	225,833	206,092	40·49	36·95	91·25	19,741	771,25
1890	30¾	1,474,646	249,508	207,517	40·60	33·46	83·17	41,991	790,55
1891	33½	1,553,048	270,365	221,505	41·78	34·23	81·92	48,860	857,45
1892	37	1,613,443	279,321	229,145	41·55	34·09	82·04	50,176	932,90
1893	38	1,681,232	271,041	214,824	38·69	30·67	79·26	56,217	947,77
1894	40¼	1,737,846	250,809	206,554	34·64	28·53	82·35	44,255	954,0
1895	40¼	1,740,235	230,583	186,081	31·80	25·66	80·70	44,502	962,03
1896	40¼	1,845,626	227,525	187,811	29·59	24·42	82·54	39,714	961,77
1897	40¼	2,121,017	238,023	195,142	26·93	22·08	81·98	42,881	963,9
1898	40¼	2,198,351	239,858	201,904	26·18	22·04	84·18	37,954	973,41

The fares paid on the tramways included in the previous table about 1d. per mile, the lines being divided into sections of about 2 miles. Reductions recently made in fares are considerable, es improved services have been provided. The number of sing the tram-cars has not been ascertained with any exact- the tickets collected give only a partial indication of the ravelling. Taking into consideration the number of school who are allowed to travel at a reduced rate, it is believed that paid by passengers average 2½d. a journey, so that the number rs in the year ended 30th June, 1898, reached the enormous 2,527,900, or about 53 for every person living in the metro- rea. Cash fares in lieu of tickets are allowed, although this es not largely prevail, as an extra fee is charged when money d.

llowing table shows the total and average cost of the various f the metropolitan steam tramways open on the 30th June,

Section.		Length.		Total Cost.	Cost per mile.
		ms.	chs.	£	£
tation to Bridge-street		1	59	96,469	55,528
street to Randwick and Coogee		5	9	113,955	22,289
st Junction to Waverley and Woollahra		4	40	60,273	13,172
to Bondi Beach		2	8	38,851	18,500
to Randwick		1	30	11,182	8,132
et Junction to Cleveland-street		0	69	17,551	20,349
tation to Glebe and Forest Lodge		2	25	45,124	19,513
and Parramatta-street Junction to Dul- ill		4	7	65,141	15,937
lge Junction to Leichhardt, Five Dock, botsford		6	57	61,409	9,148
tation Junction to Botany		6	66	91,143	13,353
lge to Gladstone Park, Balmain		2	66	30,481	10,790
Bridge to St. Peters		0	63	13,092	16,625
Moore Park		1	6	18,582	17,286
Cost of construction		40	25	663,253	16,453
:—	£				
workshops	55,261				
stock	240,450				
ry	12,342				
e	2,113				
		……		310,166	……..
Total or average		40	25	973,419	24,147

st of construction and equipment of the Ashfield to Enfield h was opened on 23rd September, 1891, was £16,371. For ended June, 1898, the revenue amounted to £1,105, and the xpenses to £1,660, showing a loss of £555 in connection with rking, or one of £1,128 if the interest on capital be taken deration. The number of passenger fares collected was 265,064. venue of the North Shore cable line was £12,345, and the £9,745. The net receipts, therefore, amounted to £2,600, per cent. upon £78,235, the total cost of the line and its t. The number of passenger fares collected was 2,961,669.

PRIVATE TRAMWAYS.

There are two steam tramways under private control withi Metropolitan area. One of these branches from the Illawarra I Rockdale and runs down to Lady Robinson's Beach, a distanc mile, being chiefly used by excursionists visiting the shores of B Bay. The line was constructed in 1885. The second line through the township of Parramatta. It commences at the Park and continues as far as the Newington Wharf at Duck Ri distance of 3 miles, where it connects with the Parramatta steamers conveying passengers and goods to and from Sydney. line was laid down in 1883. A private steam tramway 2¾ miles in l was opened in 1891 from Fassifern to Toronto, on Lake Macquar

A private line was some time ago constructed at North Sydney f purpose of connecting the cable tramway on the heights of St. Le with the village of Gordon. On this line a magnificent suspension has been built. It is designed in three spans—one of 500 ft., an end spans each of 150 ft., with an altitude of 180 ft. above water The tramway was, however, not quite completed, and has never opened for traffic.

OMNIBUSES, CABS, AND WAGGONETTES.

In addition to the Government tramways, the citizens of Sydn well provided with means of travelling within the city and sub limits, as there are numerous omnibus and cab proprietaries. The traffic, with the exception of the tramway system, is controlled b Transit Commissioners, comprising the Mayor of Sydney, the Ins General of Police, a representative elected by the Aldermen o urban Municipalities, and one by the holders of licenses und Commissioners. The traffic employs a little over 8,900 horse including the licensed drivers, some 3,300 men.

The number of cabs registered and licensed by the Transit Commis under the Municipal by-laws is 988, in addition to which there a omnibuses and waggonettes, and 516 drays and vans. The public i is secured against exaggerated demands on the part of licensed c and other drivers of public vehicles by a system of fares fixed scale liberal to the licensee, whilst not too high for the public to pay. The drivers are placed under the direct control of the T Commissioners, who have power to obtain redress from the own the vehicles, should any just complaints be made against them.

wing shows the number of vehicles of each class licensed during year 1897, and the number of registered drivers :—

Description.	Vehicles.		Drivers, etc.	
	Number.	License Fees.	Number.	License Fees.
		£		£
Omnibuses	357	1,621	*645	224
Waggonettes	15	60		
Cabs	988	1,427	1,255	457
Drays and vans	516	486	534	133
Total	1,876	3,594	2,434	814

* Includes 72 conductors.

POSTS AND TELEGRAPHS.

In the matter of postal and telegraphic communication the colony of w South Wales is liberally provided for. Not only is the intercolonial egraphic system fairly perfect, but the colony is in direct com- nication with Europe and the outer world by means of the cables necting with the various Asiatic continental telegraph lines. A marine cable also connects the colony with New Zealand, and its Australian terminus within sight of the spot where Captain k landed on the shores of Botany Bay, and within a stone's throw he monument erected to the memory of La Pérouse—the unfortunate gallant emulator of the great English navigator—and the tomb of e Le Receveur, the botanist attached to his staff.

The history of the Postal Department of New South Wales is interest- as affording a striking illustration of the manner in which very all beginnings have led to great results. For the first twenty-three rs of the colony's existence there were neither regular post-offices nor ans of postal communication. The first post-office was established by vernor Macquarie in the year 1810, Mr. Isaac Nichols being appointed stmaster. The office was in High-street (now known as George-street), the residence of Mr. Nichols, who was, "in consideration of the uble and expense attendant upon this duty," allowed to charge, on livery to the addressee, 8d. for every English or foreign letter of atever weight, and for every parcel weighing not more than 20 lb., 6d., and exceeding that weight, 3s. The charge on Colonial letters s 4d., irrespective of weight; and soldiers' letters, or those addressed their wives, were charged 1d. Very little improvement in regard to tal matters took place for some years. In 1825 an Act was passed Sir Thomas Brisbane, with the advice of the Council, "to regulate postage of letters in New South Wales," giving power for the ablishment of post-offices, and for the fixing of rates of postage. A

proclamation was subsequently issued, fixing the rates of postage
salaries and allowances of the postmasters; and at the same time
were invited to tender for the conveyance of mails between Syd
Parramatta, Windsor and Liverpool; between Liverpool and
belltown; and from Parramatta to Emu Plains, and thence to B
It was, however, not until 1828 that the provisions of the Act
into full force. The rates of postage appear to have depended u
distance and the difficulty of transmission. The lowest singl
rate was 3d., and the highest 12d., the postage on a letter in
according to its weight, and the minimum fee being charged on
not exceeding ¼ ounce. Letters between New South Wales a
Diemen's Land were charged 3d. each (ship rate), and newspa
Other ship letters were charged 4d. single rate, and 6d. for any w
excess. The privilege of franking was allowed to the Govern
number of the chief public officials, and letters to and from p
passed free under certain regulations. In 1828 the total
of salaries paid to the country postmasters was £34 7s. 9
the establishment in Sydney consisted of one principal pos
one clerk, and one letter-carrier. A letter-carrier was subse
appointed for Parramatta, and he was authorised to cha
public 1d. on every letter delivered by him, which was h
remuneration. In 1831 a twopenny post was established in S
and in 1835, under Sir Richard Bourke, the Act of 18
repealed, and another Act passed, which fixed the charge on
letter at 4d. for 15 miles, 5d. for 20 miles, 6d. for 30 mil
so on up to 1s. for 300 miles. In 1837 a post-office wa
lished in Melbourne, which was then, of course, a part of Ne
Wales. Stamps were introduced in the same year in the
stamped covers or envelopes, which are believed to have been
postage stamps ever issued.

In the year 1838 the Sydney establishment had grown unti
sisted of one postmaster-general, one accountant, six clerks, si
carriers, and one office keeper, or fifteen persons in all. The re
that year was £8,390, and the expenditure was £10,357; there
many as forty post-offices throughout the colony, which then
what are now known as Victoria and Queensland, besides which
Zealand was not a separate colony until 1841, the only post-
had at Korraika—was paid through the New South Wales
ment. An overland mail to Adelaide was established in 1
postage on a single letter being 1s. 6d. The Postal Act was
again in 1849, during the government of Sir Charles Fitzr
the postage on town letters was fixed at 1d., and on inland lette
while the postage on ship letters was 3d. in addition to the inl
The use of postage stamps in the present form was authorised,
privilege of franking was abolished, petitions to the Queen, the G
and the Executive and Legislative Councils being the only co
tions allowed to pass free through the post.

the discovery of gold in the year 1851 the history of the
has been one of progress and improvement. The Post-
neral was originally a non-political officer, as the Registrar-
and the Auditor-General are at present. In the year 1855—
or which an annual report was laid before Parliament—there
the colony altogether 155 post-offices. The head office was in
reet, on the same site as the present edifice, but the structure
l and inconvenient, notwithstanding its doric columns and
in front. There were no electric telegraphs in the colony at
, and the arrival of vessels at the Heads was signalled to the
ry by means of flags and semaphores. It was in September,
t the first railway was opened in New South Wales, and prior
ne the Southern and Western mails used to leave the General
e in old-fashioned mail-coaches every evening. During that
total number of miles travelled by the postal contractors,
and on horseback, was 1,023,255. The number of letters
rough the Post Office was 2,114,179, of which 617,041 are
as "foreign," or, in other words, were addressed to places
he colony. The number of newspapers was 2,100,989, of
281,613 were inland, and 819,376 were "foreign." Book
nd packets were not reckoned separately, but were counted as
Ten petitions to the Governor or the Council were conveyed
ng the year. The revenue of the Department for 1855 was
and the expenditure was £60,221, while the staff numbered
ns in all, of whom 56 were attached to the office in Sydney.
al report states, with something akin to pride, that communi-
th Victoria was effected not less than three times a week.

t iron pillar letter-receivers in Sydney were erected in 1856.
he same year 22 miles of railway were utilised for postal pur-
d 16½ miles were added in the following year. The number
delivered in Sydney in 1856 was 1,336,032, and in the
,481,416, being an average of about 10½ to every person in the
y. There were 86,914 registered letters in 1857, and 7,873 oz.
ere sent through the post that year, as against 23,712 oz. in the
year. The postal revenue in the year 1857 amounted to
of which £34,031 was derived from the sale of stamps. The
re amounted to £63,865, out of which sum the conveyance of
the colony absorbed £41,324, without reckoning £20,000
he subsidy for the conveyance of English mails. In his report
the Postmaster-General was obliged to admit that the mail
for the conveyance of mails between the Australasian Colonies
United Kingdom had proved "an utter failure, so far as the
time-table might be taken as a criterion." Only 10 monthly
ners arrived that year, and but one to contract time; while
ere despatched. The time allowed was 58 days from South-
o Sydney, and 56 days from Sydney to Southampton. In
e were 1,536 post-offices in the colony, besides 510 receiving

offices and three travelling post-offices. The postal lines for th
extended over 34,444 miles, on which the mails were conveyed
miles by rail and tram, 824 miles by steamer, 20,472 miles by
and 10,393 miles on horseback. The number of miles actually tr
by the mails was 10,333,500, being an increase of 560,000 ov
mileage of the previous year.

But while the number of miles travelled by the mails in 189
over ten times the mileage travelled in 1855, the number of
posted during the same period had increased more than 34 time
the number of newspapers over 20 times. In 1897 the numl
ordinary and registered letters was 72,490,144, of which 65,2
were posted within the colony, or 50 per head for every individ
the population. The number of newspapers was 42,426,394, of
the number posted in the colony was 38,808,754, or 30 per
Packets and book parcels numbered 12,718,704, of which 11,6
were posted within the colony, or about 9 per head ; while in
the first year in which they were enumerated separately, there
only 68,564 packets and parcels. Post cards were first introdu
1876, when the number sent was 128,786; in 1897 no less
1,085,770 were posted.

Double cards, which may be closed against inspection, and
are designated letter cards, were made available for the use
public on the 1st July, 1894, the rate charged being 1½d. each.
cards may be transmitted within the colony, as well as to Vi
Queensland, South Australia, Western Australia, Tasmania,
Zealand, Fiji, and British New Guinea. The number carried
the end of 1894 was 112,400, while 11,300 were received, n
the total which passed through the post office 153,700. In 18
number posted was 429,440, and received 19,500, making a to
448,940 passing through the office.

A parcels' post, for inland and intercolonial transmission, was i
rated on 1st October, 1893, the maximum weight being fixed at 3
11 lb., according to mode of conveyance. The number of
carried under this system up to the close of that year was 4
while during 1894 there were 349,218 parcels carried. Und
foreign system, which has been in force since August, 1886,
parcels were carried in 1893 ; and in the following year, 18,67
1897 the total number of parcels carried was 539,503, of which 4
were inland, 71,826 intercolonial, and 28,496 foreign.

The progress made in regard to the means of postal commun
with the United Kingdom and the continents of Europe and A
is also marvellous. Instead of the unsatisfactory ocean mail
of 1857, which nominally brought monthly mails, with news 5
old, there are now four great lines of ocean steamships, which
mails *via* the Suez Canal at least once a week, the time occu
the conveyance of the mails averaging 34 days. In addition
is another mail service *via* San Francisco, which averages 37½

›etween London and Sydney, and arrives and departs monthly: nonthly service *via* Vancouver, by which mails are sent from to London in about 41¾ days. In the interests of trade, the and Government subsidises a steam service with London *via* Straits, and advantage is taken of these vessels to send mail This route, however, is but little used by New South Wales. owing table shows, as far as possible, the average time and the : time occupied in the transmission of letters by various routes . London and Sydney during 1897 :—

Service.	London to Sydney.		Sydney to London.	
	Average Time.	Quickest Time.	Average Time.	Quickest Time.
	days.	days.	days.	days.
nsular and Oriental S. N. Co., *via* Colombo and Brindisi	$33\frac{19}{26}$	31	$34\frac{9}{26}$	33
ıt S. N. Co.; *via* Suez and Naples...	$34\frac{5}{13}$	33	34	32
·n S.S. Co., *via* San Francisco.........	$37\frac{7}{13}$	36	$37\frac{7}{13}$	36
ıageries Maritimes, *via* Marseilles ..	*	*	$33\frac{5}{13}$	31
l-Deutscher Lloyd, *via* Genoa.........	*	*	$36\frac{2}{13}$	34
·dian-Australian, *via* Vancouver......	*	*	$41\frac{10}{13}$	37

lar steam communication with England was first established in Prior to that time the colony had to depend upon the irregular and despatch of sailing vessels, but in that year the steamships ia, Chusan, and Great Britain were despatched from England. the voyage in 60 days, and causing a strong desire in the of the colonists for a more frequent and steady system of ıication with the Old World. The outbreak of the Crimean . 1854 hindered the accomplishment of this object for a while. 1856 a line of steamers was again started, and the service was on by the Peninsular and Oriental Company and the Royal 'ompany for some years, without, however, giving so much tion to the public as might have been expected.

ır back as 1854 a proposal was made for the establishment of a mail packets *via* Panama, and negotiations on the subject were on for several years between the British Government and the nents of New South Wales and New Zealand. The result was 1866 the line was started, and continued in operation until l of 1868, when it was terminated through the failure of the y by which it had been carried out. In the following year this in conjunction with New Zealand, inaugurated a mail service Francisco, which, with a few interruptions and under various ›ns, has been continued up to the present time. The contract expired in November, 1890, and has since then been renewed year to year, New South Wales at present paying a subsidy of £4,

The establishment of a mail route *via* America had the eff stimulating the steamship owners who were engaged in the servic Suez, and from that time there was a marked improvement in steamers laid on, as well as in the punctuality and speed with whic mails were delivered. The Peninsular and Oriental Company with very few interruptions, carried mails for the colonies almost the inception of the ocean steam service. Towards the end of the Orient Company commenced carrying mails between Australia the United Kingdom, and has continued to do so ever since. recently the steamers of the Messageries Maritimes of France and North German Lloyd have entered the service between Europe Australia.

During 1893 direct communication was established between Sy and Vancouver, British Columbia, the New South Wales Govern undertaking to pay an annual subsidy of £10,000 for the mainte of this service for a period of three years. In May, 1896, this a ment was renewed for a further period of three years. Contr were made in 1895 by the Imperial Government with the Pe sular and Oriental and the Orient Companies for the extension of mail service until the 31st January, 1898; and in the beginning of a new contract was made, to take effect from 1st February, 1898, maximum time for delivery of the mails between Sydney and Lo being reduced. The mails of New South Wales are now carried b lines of steamers, four going by way of Suez, one *via* San Francisco, one *via* Vancouver. One or two mails are received and despat every week. The French and the German steamship companies do receive subsidies from the Government of New South Wales.

The amount paid by each contributing colony, on the basis of lation, towards the cost of the Federal Ocean Mail Service *via* for the year 1897, was as follows:—

	£	s.	d.
New South Wales	26,976	1	8
Victoria	24,468	0	0
Queensland	9,807	10	0
South Australia	7,493	5	0
Tasmania	3,448	6	8
Western Australia	2,806	16	8
Total	£75,000	0	0

The contribution from the United Kingdom was £95,000, m £170,000 the total amount paid to the two steamship companies pproximate net cost to New South Wales of the Federal Ocean rvice *via* Suez, the San Francisco Service, and the Vancouver for the years 1894 to 1897, may be gathered from the following nt:—

Service.	Estimated Net Cost.			
	1894.	1895.	1896.	1897.
	£	£	£	£
Peninsular and Oriental and Orient panies)	12,877	12,438	10,510	8,686
cisco (per Union S.S. Co. of New nd, Ltd.)	1,892	2,123	1,645	1,935
r (per Canadian-Australian Line)...	7,846	9,041	7,717	8,780

bsidy of £1,200 per annum was for several years paid to the . Co. for the transport of mails between Sydney and New ia, New Hebrides, Sandwich Islands, and Fiji. The same also provides a twenty-one days' service between the principal of the New Hebrides Group. A subsidy of £1,000 was paid service between the Islands when it was a monthly one. otes were allowed to lapse at the end of 1891.

year 1865 the office of Postmaster-General was made a political first without, and subsequently with, a seat in the Cabinet. The -office building in George-street was found so small and incon- that it was resolved to build a larger and more commodious n the same site, and in 1863 the business of the department oved to a temporary wooden building in Wynyard-square. It until 1873 that the construction of the new building was tly advanced to allow of the officers removing from the crowded entilated structure in Wynyard-square, where they had carried business under great disadvantages and difficulties, to the present structure, which is in every respect a credit to the colony. d-quarters of the Electric Telegraph Department, the Money d Postal Note Office, and the Post-office Savings Bank are in building, so that the Postmaster-General has around him all ous branches over which he presides. The table given below e operations of the Post-office in five-year periods from 1855 to d annually since that date to the end of 1897. For 1885 and ng years, the number of persons employed and the income and ure refer to the Department as a whole; prior to that year es refer to the Post Office only. Also, from 1885 the income ive of interest on Savings Bank investments, and interest due

on uninvested Savings Bank balances in the Treasury ; and the
diture is exclusive of interest allowed to Savings Bank depositor

Year.	Post Offices.	Receiving Offices.	Persons employed in the Department.	Extent of Postal Lines.				Distance actually travelled.	Cost of conveyance of mails, Foreign and Inland.	Income.
				Railway, Tramway, and steamer.	Coach.	Horse.	Total.			
	No.	No.	No.	miles.	miles.	miles.	miles	miles.	£	£
1855	155	8	223	*	*	*	*	1,023,255	45,412	24,302
1860	289	*	289	61	1,757	6,413	8,231	1,461,518	44,303	45,613
1865	435	*	513	141	2,528	9,323	11,992	2,521,212	49,840	70,986
1870	562	*	690	339	3,865	10,038	14,242	3,062,458	48,649	84,441
1875	752	7	967	435	5,407	11,829	17,671	3,787,757	138,912	107,780
1880	927	119	1,536	891	8,717	12,819	22,427	5,246,373	174,238	194,064
1885	1,115	202	3,205	1,797	11,736	13,150	26,683	6,621,906	226,105	486,449
1886	1,157	217	3,168	1,948	12,540	12,606	27,094	6,891,200	233,723	503,646
1887	1,167	203	3,227	2,074	13,305	12,135	27,514	7,015,600	254,886	521,564
1888	1,203	288	3,387	2,219	14,411	11,530	28,160	7,144,500	245,403	570,540
1889	1,261	305	3,676	2,263	14,914	11,541	28,718	7,299,400	212,725	598,394
1890	1,338	325	3,821	2,273	15,774	11,547	29,594	7,403,000	231,467	637,975
1891	1,384	344	4,070	3,085	16,370	11,802	31,257	8,235,000	207,357	651,096
1892	1,423	377	4,478	3,217	17,467	11,616	32,300	8,568,700	210,426	652,286
1893	1,423	404	4,845	3,412	18,380	11,000	32,792	8,784,600	200,792	643,369
1894	1,445	450	4,982	3,473	19,331	10,260	33,064	8,840,000	214,070	628,954
1895	1,470	502	5,063	3,473	19,545	10,675	33,693	9,338,000	210,354	648,852
1896	1,503	503	4,814	3,516	20,309	10,258	34,083	9,773,500	206,619	665,627
1897	1,536	510	4,936	3,579	20,472	10,393	34,444	10,333,500	212,150	713,709

* Not recorded.

It will be noticed that, until 1897, the Postal Departme
carried on at a considerable annual loss to the State. This w
in a great measure to the wide area over which the populat
the country is scattered, which necessitates a proportionatel
expenditure for the carriage of mails ; and also to the fact that
papers, which form the bulk of the mail matter, are carrie
But it has always been held that the safe and regular despat
delivery of the mails is an item of too much importance
political, commercial, and social life of the colony to be neglecte
though it should entail a heavy charge upon the general revenue.
in 1897, if interest on the cost of construction be taken into a
there was a considerable deficiency in the revenue. It has bee
mated that an additional sum of £84,000 would be obtained
adoption of a uniform rate of postage of 2d. per ½ oz. through
colony, and that the abolition of the free transmission of new
would produce a further sum of £25,000, making together £1
This would more than wipe out the deficiency in the postal r
reckoning the interest charge on the cost of construction of tele

The revenue of the department for 1897 included the fo
amounts :—Postage (less £21,000 approximate value of postage
used as duty stamps), £481,615 ; electric telegraphs, £152,651
phones, £39,613 ; money order commission, £15,133 ; fees for
bags and boxes, £6,552 ; collections from other Governments,
poundage on postal notes, £9,092 ; and miscellaneous receipt

xpenditure for the year comprised :—Salaries, £384,067 : convey-f mails, £212,150 : cable subsidies, etc., £17,009 ; postal and tele-ic working expenses (various), £77,867 ; postage stamps re-ased from the public and used as remittances by public officials, 24 ; and allowances to the Railway Department for transacting and public telegraph business at railway offices, £5,898. sive of 833 mail contractors and 100 mail porters, 4,936 persons employed by the Department, of whom 1,215 were engaged in ad office. The following return will give an idea of the magni-of the work done by the Post Office of New South Wales :—

Letters.		Post Cards.	Newspapers.		Packets & Book Parcels.		Parcels.
Beyond he Colony.	Inland.		Beyond the Colony.	Inland.	Beyond the Colony.	Inland.	
617,041	1,497,138	......	819,376	1,281,613	‡......	‡......	...
868,740	3,362,015	......	910,478	2,758,305	12,196	71,540	...
1,106,045	5,222,308	......	1,028,954	3,660,904	28,852	221,052	...
1,103,200	5,980,300	......	1,298,600	2,608,100	36,700	121,000	..
1,710,100	11,108,800	......	1,385,900	4,876,700	82,300	274,700	....
2,776,000	18,958,500	155,290	2,381,200	11,409,800	146,600	565,000	...
5,528,200	34,023,000	341,000	3,987,900	21,579,500	552,600	2,894,200	....
5,582,700	37,267,200	348,700	4,276,200	†23,210,000	860,800	3,983,000	....
5,624,000	39,221,900	442,100	4,744,400	†25,617,600	980,800	4,549,900	..
6,202,800	42,783,200	520,920	5,255,000	28,500,400	1,041,600	5,760,300	....
6,346,700	47,624,600	620,100	5,599,000	30,931,800	1,305,000	6,564,400	
8,109,200	54,908,400	677,400	6,949,900	33,647,300	2,214,300	6,725,300	21,300
9,145,600	59,033,000	808,700	7,233,400	35,283,900	2,902,100	8,166,400	25,700
11,549,000	65,025,800	827,300	9,529,300	35,991,200	3,274,900	9,105,300	23,000
10,616,700	66,924,000	850,420	9,055,600	35,872,300	3,287,100	8,773,500	63,700
11,125,500	56,967,800	§1,170,000	9,503,900	32,163,400	5,654,200	7,919,400	367,900
11,974,300	56,104,700	§1,294,700	9,235,800	35,667,100	4,206,200	7,053,000	422,800
12,409,300	56,426,300	§1,406,500	9,324,000	36,234,300	6,306,000	9,297,600	506,100
13,277,000	58,513,200	§1,534,700	8,457,600	33,968,800	5,481,900	9,236,800	579,500

† Estimated. ‡ Included with letters. § Inclusive of letter cards.

e progress exhibited by the table just given is astonishing. In the total number of letters and newspapers, inland and foreign, only a shade over 2 millions each, whereas in 1897 the number of rs and post cards had grown to 74 millions, and newspapers to over illions, without reckoning more than 13 million packets and book els which, in the year first mentioned, were included with the rs.

e charge on letters between the Australasian colonies and the ed Kingdom, which had for a long period been at the rate of 6d. alf-ounce *via* Italy, and 4d. by the long sea route, was reduced in to 2½d. By an arrangement made at the Postal Congress held at na in the middle of 1891, New South Wales, as well as the colonies of Australasia, entered the Universal Postal Union on st October, 1891. The effect of this has been to extend the reduced to all countries embraced in the Union. The letters posted in South Wales for countries outside Australasia increased from 00 in 1891 to 1,101,000 in 1892, the newspapers from 793,600 to

873,100, and packets from 142,000 to 194,900 ; but in 1897 the nu of letters had increased to 1,393,114 ; newspapers had decrea 831,260, while packets had increased to 373,928.

By an enactment made in June, 1893, it is required that newspa be registered at the General Post Office, and both newspapers supplements must be printed in New South Wales, from type s therein, in order to entitle them to transmission as newsp If posted within seven days from the date of publication, n papers are transmitted within the colony free, if not exceeding 1 in weight, and at the rate of ½d. each for every additional 1 Newspapers for Victoria, South Australia, Western Australia, Tasm New Zealand, and Fiji (if printed in New South Wales) are charge each up to 10 oz., and ½d. for every additional 10 oz. or fraction the and to Queensland and British New Guinea, ½d. for every 2 oz. T United Kingdom or foreign countries the charge is 1d. each for weight up to 4 oz., and ½d. for every additional 2 oz.

The following table shows the number of registered letters dealt during the last four years. The figures represent the business of South Wales; prior to 1894 the statistics were only compiled fo General Post Office, Sydney.

Year.	Number.	Year.	Number
1894	856,128	1896	951,02
1895	902,448	1897	998,30

Of the registered letters in 1896 and 1897, there were respe 346,549 and 360,767 from and to places beyond the colony, 604,476 and 637,537 inland.

Compared with the other provinces of Australasia and wit United Kingdom, New South Wales occupies a favourable positi regards the number of letters, post cards, and newspapers carri head of population, as may be seen from the following table :—

Country.	Number per head of population.		Country.	Number p of pop
	Letters and postcards.	News-papers.		Letters and postcards.
New South Wales ...	56	32	New Zealand	48
Victoria	56	21	Australasia	53
Queensland	38	24	United Kingdom.....	59
South Australia	53	26	England and Wales..	64
Western Australia .	86	45	Scotland	50
Tasmania	48	30	Ireland..	31

New postal routes to the extent of 877 miles were opened 1897, while 516 miles of routes were abandoned.

MONEY ORDERS AND POSTAL NOTES.

money order system was brought into operation in New South
in January, 1863, when nineteen offices were opened—the head
n Sydney, and eighteen branch offices in various parts of the colony.
ne of the same year the operation of the system was extended to
nited Kingdom and all the Australasian colonies with the excep-
f Tasmania, and the number of offices in the colony was increased
ty-seven. The colony of Tasmania entered into the arrangement
5, and the Department has continued steadily to make progress. In
on to the ordinary transmission of money orders by post, remit-
may now be made by telegraph from all Money Order Offices
are also telegraph offices, to similar offices in other colonies.
raphic money orders are also issued and paid at Money Order Offices
cted by telephone with the telegraph system. At the end of 1897
were 636 Money Order Offices in the colony, thirteen new offices
g been established and four abolished during the year. The
y orders issued during the year amounted to £1,311,850, whilst
1,524 represented the value of orders drawn on the colony and
therein. The net commission received by the Government in the
e of the twelve months was £15,533.
stal notes were introduced on the 1st October, 1893. They range
lue from 1s. to 20s., and may be obtained at all Money Order Offices,
oundage varying from 1d. to 4d. Postal notes may be exchanged
een New South Wales and the other Australasian colonies, except
ern Australia and New Zealand. During 1897, the value of the
of New South Wales cashed within the colony was £377,281 18s. 8d.,
f those of other colonies, £17,525 14s. 1d. The revenue derived
the system during the last quarter of 1893 was £548 17s. 10d.:
g the year 1894, £3,877 13s. 4d.; during 1895, £6,316 12s. 4d.;
g 1896, £7,838 17s. 4d.; and during 1897, £9,091 19s. 8d. In
chapter] dealing with Private Finance, further particulars of the
y order and postal note systems will be found.

POST-OFFICE SAVINGS BANK.

e Post-office Savings Bank, which, like the Money Order Office,
der the control of the Postmaster-General, was established in the
1871 at the General Post Office, Sydney, with branches at the
ipal country towns. The growth of this branch of the service has
kept pace with those already mentioned. In 1897 there were 512
office Savings Banks—an increase of 10 on the number open in
revious year. During the year, 45,347 new accounts were opened,
4,390 accounts were closed, the number of accounts remaining open
close of the year being 151,343. The amount of deposits received
2,190,882,—an increase of £80,303 as compared with the business

of the previous year. The sum of £123,537 was added to dep accounts for interest. The balance to the credit of depositors at of the year was £4,691,833. The average amount of each depo £6 11s. 8½d., and the average balance at the credit of each deposi £31 0s. 0¼d. Further information respecting Savings Banks found in the chapter on Private Finance.

TELEGRAPHS.

The electric telegraph was first used by the public of New Wales on the 26th January, 1858, when the line from Sy Liverpool, 22 miles in length, was brought into operation. Fr small beginning the system has increased until in 1897 there w stations in the colony, and 12,778 miles of line open, carrying miles of wire in actual use, while there were 172 miles of line a miles of additional wire in course of construction. The followi gives a view of the business of the Telegraph Branch of the Po from 1865 to 1897:—

Year.	Telegraph Stations.	Telegrams transmitted, delivered, and in transit.	Actual Revenue received.	Lines.	Wires.
	No.	No.	£	miles.	miles.
1865	55	*138,785	29,760	....	2,989
1870	86	*173,812	28,550	....	5,247
1875	137	*719,745	48,657	....	8,012
1880	289	1,319,537	84,110	....	13,188
1885	404	2,625,992	155,073	....	19,864
1886	425	2,661,126	158,128	....	20,797
1887	434	3,258,733	164,511	....	21,444
1888	460	3,936,830	185,965	....	22,219
1889	485	5,932,670	186,862	10,732	22,606
1890	628	4,101,449	193,707	11,231	23,598
1891	674	4,046,251	191,319	11,697	24,780
1892	706	2,976,109	185,014	11,905	26,443
1893	724	2,853,691	157,482	12,007	27,326
1894	813	2,464,074	147,903	12,201	28,085
1895	834	2,635,456	145,901	12,316	28,799
1896	856	2,796,776	159,741	12,418	30,820
1897	886	2,728,360	155,162	12,778	33,073

* Number despatched only.

number of telegrams received and despatched during the year, telegrams being counted once only, amounted to 2,600,794, or 2 per head for every individual of the population.

state of telegraphic construction in the principal countries of the at the latest available dates is given herewith. The figures are ting, though the circumstances of Australasia and the older es are so dissimilar as to make a comparison between them more than valuable :—

Country.	Length in Miles— Of Line.	Length in Miles— Of Wire.	Country.	Length in Miles Of Line.	Length in Miles Of Wire.
asia	50,004	109,740	Italy	25,449	98,317
ne Republic	25,345	59,060	Japan	11,720	37,661
-Hungary	43,758	152,030	Mexico	40,900	......
n	3,956	19,908	Netherlands	3,537	12,560
	10,143	21,936	Norway	5,232	12,994
	29,318	70,761	Portugal	3,985	8,839
olony	6,609	18,631	Russia	78,396	157,397
	6,965	8,330	Spain	17,883	42,694
rk	3,394	9,746	Sweden	5,325	15,172
	58,267	197,307	Switzerland	4,436	12,608
y	84,782	330,613	Turkey	21,800	33,760
	5,065	6,000	United Kingdom	41,393	279,935
inclusive of re States).	46,375	142,926	United States	190,614	841,002

CABLE SERVICES.

a Conference of the Postal and Telegraph authorities held in y in March, 1891, the colonies of New South Wales, Victoria, Australia, Western Australia, and Tasmania undertook to make alf the loss which the Eastern Extension Telegraph Company sustain by a reduction in the schedule of cable charges. The nt to be guaranteed to the Company for the time during which the ct was in existence was one-half of the amount of receipts short sum of £237,736 (the amount of the Company's receipts in 1889, deducting out-payments), the other half of the loss to be borne by ompany. The amended cable rates came into force in May, 1891. uropean messages the rates were reduced from 9s. 4d. to 4s. 2d. per for ordinary messages from Sydney, from 7s. 1d. to 3s. 8d. per word overnment messages, and from 2s. 8d. to 1s. 10d. per word for Press ges, proportionate reductions being made for messages to countries than those in Europe. By a further agreement dated November, the contracting colonies decided to contribute towards such sum

the guarantees to the Company and South Au
the reduction in the international rates.

From May, 1893, to April, 1894, the amo
Wales to the Cable Company in respect of th
with the reduced rates mentioned above, was
paid to South Australia. The total contributi
of all cable services was £21,862; the amou
the year ended 30th April, 1895, was £21,59
year the amount was £18,167, and in 1897,
to the Cable Company and the South Aust
now disappeared, the receipts in both cases
guarantee. For the twelve months ended 3
contributions which New South Wales was ca
Duplicate Cable Subsidy between Port D
£13,403; Victoria-Tasmania Cable Subsidy,
Guarantee, £680; and Queensland-New Cale
total, £17,618.

In the month of April, 1892 an agreement w
New South Wales and the Société Française de
(now known as the Compagnie Française des (
which the latter undertook to lay down a subm
pose of establishing telegraphic communicati
and New Caledonia, in consideration of the
Wales (Queensland having agreed to contrib
annual sum for a period of thirty years, at the
such smaller sum as shall, together with one-
received by the company for messages during
working expenses—not exceeding £2,400—a
vision was made that the Government shou
cable for official messages up to this amount
cable was opened.

The establishment of cable communication

Postal and Telegraphic Conference, held in New Zealand during 1894, and was reaffirmed by conferences of a similar character, ıet in Hobart in February, 1895; and in Sydney, in January, The Colonial Conference, which sat in Ottawa in June, 1894, ommended that such a cable should be constructed; and the y of State for the Colonies appointed a Commission, on which ish, Canadian, and Australasian Governments were represented, purpose of inquiring into the best route for the cable, and the cost of its construction. This Commission recommended the ı of the proposals made at the Sydney Postal Conference, which l for the distribution of the cost of construction and maintenance between Great Britain, Canada, and Australasia, and fixed the places within British territory.

ollowing table shows the amount of outward business transacted South Wales with Europe and the East during the last seven Compared with 1891, the year 1897 shows an increase of 6,046 s, and of £22,287 in revenue :—

	Cable Messages sent from New South Wales.	Amount received.	Year.	Cable Messages sent from New South Wales.	Amount received.
	No.	£		No.	£
1	14,982	46,192	1895	17,761	60,652
2	16,511	41,746	1896	19,826	68,040
3	15,587	50,625	1897	21,028	68,479
4	15,146	50,567			

* Partly old, partly new, rates.

ıumber of cablegrams despatched from each of the colonies in he number received, and the cost of the messages are given —

olony.	Forwarded.		Received.		Total.	
	Messages.	Cost.	Messages.	Cost.	Messages.	Cost.
	No.	£	No.	£	No.	£
th Wales ...	21,028	68,479	17,494	52,566	38,522	121,045
....	18,350	65,889	16,542	55,628	34.892	121,517
nd	2,327	8,036	1,855	6,522	4,182	14,558
ıstralia	9,807	27,301	10,523	31,938	20,330	59.239
Australia ...	18,786	66,994	16,020	48,288	34,806	115,282
ı	718	1,860	624	1,439	1,342	3.299
land......	9,737	36,309	8,264	27,227	18,001	63,536
Total	80,753	274,868	71,322	223,608	152,075	498,476

TELEPHONES.

The total number of lines connected with the telephone system
colony on the 31st December, 1897, was 6,726, of which 5,953
Sydney and suburbs, and 773 in the country. There were 26
exchanges, and the number of telephones in use was 7,514.
of wire used in the transmission of messages cannot be given,
telegraph wires are largely used for communication by telephone.
particulars regarding telephones in the Australasian colonies
will be found in the following table:—

Colony.	Exchanges.	Telephones.	Length of Wires (distinct from Telegraph Wires).
	No.	No.	miles.
New South Wales	26	7,514	*
Victoria	13	3,082	10,705
Queensland	8	1,127	1,117
South Australia	9	1,686	2,[illegible]
Western Australia	9	1,569	1,327
Tasmania	4	810	570
New Zealand	29	5,767	*

* Not furnished.

PASTORAL INDUSTRY.

rapid settlement of the colony has, in a great measure, been ue to the fitness of its soil, vegetation, and climate for the suc- earing of the principal species of stock which supply the wants sed men, and so largely contribute to the wealth of nations. For ears it was believed that a considerable part of Australia was suitable for stock, and this opinion was fostered by the accounts of ier explorers, who reported that the interior of the continent was esert. These apprehensions, however, were soon dispelled, and the t difficulties offered to the successful rearing of stock disappeared he energy of the colonists. One thing particularly favoured the : though the number of native animals was very considerable, ing chiefly marsupials of little commercial utility, there happily no large species of carnivora which could seriously interfere e increase in the flocks.

eginnings of pastoral enterprise in the colony were very humble. ole stock of the community which accompanied Captain Phillip sed only 1 bull, 4 cows, 1 calf, 1 stallion, 3 mares, 3 foals, 29 2 pigs, and a few goats; and although the flocks and herds of asia have not sprung from these animals alone, it will be seen small a scale the business of stock-raising was first attempted. tematic record of the arrival of live stock seems to have been the early days of settlement; but it appears that in the period Governor Phillip's landing and the year 1800 there were ght importations, chiefly of sheep from India. It is stated that lose of the year 1792 the live stock of the colony consisted of ed cattle (old and young), 11 horses, 105 sheep (which were oted at £10 10s. each), and 43 hogs. By 1796 the numbers gely increased, the colony then possessing 57 horses, 101 cows -calves, 74 bulls and bull-calves, 52 oxen, 1,531 sheep, 1,427 nd 1,869 hogs; a cow being worth £80, a horse, £90; a sheep Cape breed, £7 10s.; and a breeding sow, £5. In 1800 there 3 horses, 1,044 cattle, 6,124 sheep, 2,182 goats, and 4,017 hogs; ree years later the number of sheep was set down at 10,157. 5, thirty-seven years after the establishment of the colony; ere 6,142 horses, 134,519 cattle, 237,622 sheep, and 39,006 pigs; 1842, these numbers had increased to 56,585 horses, 897,219 cattle, 4,804,946 sheep, and 46,086 pigs. As soon as the produce stock began to exceed the demand for food, the increase became v rapid, and at the end of the year 1850 the stock of the colony number 13,059,324 sheep, 1,738,965 cattle, 132,437 horses, and 61,631 pigs.

The severance, in 1851, of Victoria, then the fairest province of t mother colony, involved a loss of 6,589,923 sheep, 390,923 catt 20,086 horses, and 7,372 pigs; so that at the close of 1851 the floc and herds of New South Wales were reduced to 7,396,895 she 1,375,257 cattle, 116,397 horses, and 65,510 pigs. After the separati of Queensland, at the close of 1859, the numbers of each kind of li stock within the existing boundaries of the colony were 6,119,1 sheep, 2,408,586 cattle, 251,497 horses, and 180,662 pigs. In t following year these figures showed a considerable decline, both account of the effects of the season, and of the large demand whi arose for stock for the stations of the new colony; and in 1861 the were in New South Wales 5,615,054 sheep, 2,271,923 cattle, 233,2 horses, and 146,091 pigs. From the numbers just given, the sheep h at the end of 1897, increased to 43,952,897, the cattle to 2,085,0 the horses to 498,034, and the swine to 207,738. In some of intervening years the numbers have been much greater, the sheep 1891 totalling no less than 61,831,416; but, chiefly owing to unfavourable seasons, although the demands on the flocks for the exp trade have also contributed to the result, the number of sheep largely diminished during the past six years. The changes which h taken place during the last decade may be traced in the follow table:—

Year.	Horses.	Cattle.	Sheep.	Swine.
1888	411,368	1,622,907	46,503,469	248,583
1889	430,777	1,741,592	50,106,768	238,585
1890	444,163	2,091,229	55,986,431	283,061
1891	469,647	2,128,838	61,831,416	253,189
1892	484,309	2,221,459	58,080,114	249,522
1893	493,231	2,269,852	56,980,688	240,860
1894	518,181	2,465,411	56,977,270	273,359
1895	487,943	2,150,057	47,617,687	223,597
1896	510,636	2,226,163	48,318,790	214,581
1897	498,034	2,085,096	43,952,897	207,738

It will be seen that since 1891 the sheep have diminished in nu to the extent of eighteen million; while there are now nearly 400 cattle in the colony less than in 1894, 20,000 horses less, and 67 ess than in that year. In order to show the districts in which anges in the flocks and herds have taken place, the following as been compiled :—

strict.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
al District ..	213,278	382,392	326,060	231,072	224,958	255,125	227,124
-lands ..	15,414,487	19,092,217	17,728,778	16,798,944	14,247,222	15,061,206	14,328,652
ern Slope ..	29,800,374	23,781,824	25,088,956	26,116,474	22,033,220	22,184,164	19,452,094
ern Plains ..	16,403,277	14,823,681	13.836,894	13,830,780	11,112,292	10,818,295	9,945,027
tal	61,831,416	58,080,114	56,980,688	56,077,270	47,617,687	48,318,790	43,952,807
Y CATTLE—							
tal District ..	550,026	582,559	581,359	622,476	535,504	559,690	552,720
e-lands ..	739,637	876,606	863,482	953,270	860,774	851,993	797,815
tern Slope ..	401,589	319,397	347,571	375,012	315,102	342,333	258,268
tern Plains ..	94,109	77,787	84,861	76,442	71,266	71,964	64,795
tal	1,785,361	1,856,349	1,877,273	2,027,200	1,701,646	1,825,980	1,673,598
ATTLE –							
tal District ..	188,944	213,107	220,908	232,812	200,892	236,106	256,905
e-lands ..	105,942	115,405	131,446	160,047	120,013	123,406	117,915
tern Slope ..	41,587	30,633	33,650	37,817	30,895	33,920	28,189
tern Plains ..	7,004	5,965	6,566	7,535	6,611	6,751	8,489
tal	343,477	365,110	392,579	438,211	358,411	400,183	411,498
–							
tal District ..	147,420	149,842	148,679	149,589	132,577	152,496	150,621
e-land ..	166,453	196,865	200,770	203,024	203,877	203,397	197,282
tern Slope ..	111,470	93,381	103,573	114,655	111,475	114,068	111,732
tern Plains ..	44,304	44,221	40,209	44,913	40,014	40,675	38,399
tal	469,647	484,309	493,231	518,181	487,943	510,636	498,034

It is estimated that at the end of the year 1898 the num
sheep in the colony was 41,241,073; of cattle, 2,015,015: a
horses, 488,504. This represents a further loss of nearly three
sheep, 70,000 cattle, and 9,500 horses.

SHEEP.

The suitability of the land for pastoral pursuits was undo
the means of leading the infant colony of New South Wales t
its first step on the path of commercial progress; and it is
little surprising at this distance of time to note how steadil
of the settlers, in the face of the almost insurmountable di
of transport which existed a century ago, availed themselves
opportunities at their disposal. The importation of valuable spe
of sheep from England or the Cape of Good Hope prior to the int
tion of steam was at all times attended with great risk, and it freq
happened that many of these costly animals died during the
voyage; but in spite of all drawbacks, the industry was on the wh
cessful, and the flocks and herds of the colonists surely, if at first
increased and multiplied.

By the year 1795, Captain Macarthur, one of the first promo
sheep-breeding in New South Wales, had accumulated a flock of
which were held in great estimation, and gradually increased in
until, as recorded by an entry in his journal ten years later, the
price of a fat wether had risen to £5. Not satisfied with the
increase of his flocks, Macarthur sought to improve the quality
fleeces, by which means he could see opening before him the pro
great wealth, and the prospect of establishing important com
relations with Great Britain. With these ends in view, he procure
the Cape of Good Hope, at great cost and trouble, a number of s
rams and ewes. A happy circumstance occurred which favou
enterprise: he had the good fortune to secure possession of
rams and five ewes of very fine Spanish breed, which had been pr
by the King of Spain to the Dutch Government. These animals
a total of twenty nine purchased at the Cape, arrived in Sydney i
and were disposed of to various breeders. With the excep
Macarthur, however, those who had secured sheep of the superio
made no attempt to follow up their advantage, being probably
satisfied with the larger gains derived from the sale of an increased
of animals. Macarthur, on the other hand, thought little of
profits, and still less of breeding entirely for human consumption.
tively watching the results of crossing his imported rams with
stock, and systematically selecting the finer ewes which w

for further mingling with the sires, he gradually improved the nd in a few years obtained fleeces of very fine texture which h the ready appreciation of English manufacturers. It has been that Macarthur was not the first to introduce merino sheep into a ; whether this be so or not, there is no doubt that to him ie credit of having been the first to prove that the production of l could be made a profitable industry in this colony.

to the present century the production of the finest wool had been chiefly to Spain, and woollen manufactures were necessarily on in England upon a somewhat limited scale, which was not likely ve in face of certain restrictions the operatives endeavoured to on their employers. These men, in support of their contention woollen trade could not be expanded on account of the limited f the raw material, argued that fine wool was obtainable only in and it was at this favourable period that Macarthur arrived in l with specimens of the wool obtained from his finest sheep, vely proving the capabilities of Australia as a wool-producing . In this way he opened up with English manufacturers a small hich, as Australasian wool rose in public estimation, gradually d until it reached its present enormous dimensions. During his England, Macarthur purchased an additional stock of ten rams es of the noted Spanish breed, nearly equal in quality to those 1797 he had procured from the Cape of Good Hope. That imals were the finest obtainable in Europe may be gathered from that they had formed portion of a present from the King of George III. Thus did Macarthur, after his return to New South patiently continue for many years the process of selection, with cess that in 1858, when his flock was finally dispersed, it was d that his superior ewes numbered fully 1,000. Victoria secured erable portion of Macarthur's flock, and the process of breeding d simultaneously in that and other adjacent colonies.

ugh the increase in the numbers of the finer sheep was satis- yet the importation of superior animals was not discontinued, and k of the colonies was augmented in 1823 and 1825 by the further tion of Spanish sheep. Sheep-breeding was about this period ced in the Mudgee district, the climate of which has produced favourable effect upon the quality of the fleeces than that of er part of the colony, and it is thence that the finest merinos procured. As might have been anticipated, the climate alia has in some respects changed the character of the Spanish The wool has become softer and more elastic, and while having ed in density it has increased in length, so that the weight of e has only slightly altered. The quality of the wool has thus, whole, improved under the beneficial influence of the climate, further enhancement in its value can be reasonably hoped for, at least every reason to believe that Australasian wool will its present high standard of excellence.

The following table, showing the number at the close of each
since the separation of Queensland, illustrates the progress of
breeding in New South Wales :—

Year.	Sheep.	Year.	Sheep.	Year.	Sheep
1860	6,119,163	1873	18,990,595	1886	39,169,3
1861	5,615,054	1874	22,797,416	1887	46,965,1
1862	6,145,651	1875	25,353,924	1888	46,503,4
1863	7,790,969	1876	25,269,755	1889	50,106,7
1864	8,271,520	1877	21,521,662	1890	55,986,4
1865	8,132,511	1878	25,479,484	1891	61,831,4
1866	11,562,155	1879	30,062,910	1892	58,080,1
1867	13,909,574	1880	35,398,121	1893	56,980,6
1868	15,080,625	1881	36,591,946	1894	56,977,2
1869	14,989,923	1882	36,114,814	1895	47,617,6
1870	16,308,585	1883	37,915,510	1896	48,318,7
1871	16,278,697	1884	31,660,321	1897	43,952,8
1872	17,566,048	1885	37,820,906		

The ratio of annual increase for the whole period is 5·47 per
Divided into four periods the ratios are—

1860–70 annual increase 10·3 per cent.
1870–80 „ „ 8·1 „
1880–90 „ „ 4·7 „
1890–97 „ decrease 3·5 „

The operation of the natural law regulating the increase of sp
viz., that the ratio of increase is inversely as the increase in the nu
of individuals, is observable in these figures, and the tendency o
rate of increase to decline as the numbers advance is clear en
Considering the unimproved condition of the pasturage over a
portion of the colony, it was apparent in 1891 that the colony
overstocked, and graziers restricted the natural increase of their f
by not putting to the rams a large number of ewes, especially those
were old or inferior in quality. Numbers of sheep were, more
boiled down for tallow and killed for export in a frozen state, so
not only was the increase of flocks arrested, but the year 1894 sh
a falling-off of nearly five million sheep as compared with 1891, whi
1895 there was a further decline of nearly nine and a half millio
which the drought was responsible for five million. In 1896, de
the loss of nearly a million and a half sheep through the effects o
season, there was an increase in the flocks of over 700,000 ; but du
the year 1897 there was a decrease of over 4,365,000, of which
drought accounted for nearly three million. Altogether, in the c
of the six years from 1891 to 1897, it may be said that the unfavou
seasons have been responsible for the loss of 15,000,000 sheep alon

The changes which have taken place in the possessions of the
owners of New South Wales may be traced in the following t

approximate classification of the flocks for each year from
397, with the exception of 1895, when the information was
ed. It is significant that while in 1891 there were 73 persons
cks exceeding 100,000, in 1897 the number was only 21 :—

Size of Flocks.

	1,001 to 2,000.	2,001 to 5,000.	5,001 to 10,000.	10,001 to 20,000.	20,001 to 50,000	50,001 to 100,000.	100,001. and over.	Total.
	NUMBER OF SHEEP OWNED.							
1	2,979,168	5,403,942	4,943,221	7,056,580	15,553,774	12,617,206	10,392,774	61,831,416
5	3,109,165	5,360,957	5,218,115	6,976,668	15,417,845	10,567,193	8,509,670	58,080,114
3	3,110,361	5,293,544	5,092,950	6,722,825	14,906,272	11,296,811	7,644,973	56,980,688
3	3,060,107	5,264,700	5,114,109	6,844,167	15,125,070	10,366,501	8,348,653	56,977,270
4	2,585,054	4,464,654	4,339,026	5,803,084	12,828,633	8,789,185	7,078,720	48,318,790
7	2,710,546	4,511,676	4,625,398	6,230,603	12,468,278	6,972,298	3,264,061	43,952,897
	NUMBER OF SHEEP-OWNERS.							
	1,954	1,696	686	495	491	186	73	13,187
	2,062	1,667	725	408	483	151	63	13,885
	2,041	1,640	717	475	477	162	53	14,033
	2,062	1,667	725	408	483	151	60	13,891
	2,026	1,638	713	401	475	149	67	13,653
	1,767	1,383	651	436	406	104	21	14,144

owing table shows the loss which may be attributed to the
ng the number which the actual increase in each year fell
hat might reasonably have been expected in a fair season.
twenty-four years over which the information extends, nine
showed no loss, or loss so slight as to be inappreciable. On
hand, ten seasons of opposite character were experienced, in
only was there no increase, but an actual decrease from the
the previous year; while in five years there was a relative
er the previous year's totals, but an actual loss of sheep from
Further inspection will show that in 1884 the loss of sheep
e enormous total of 8,138,000, a number larger than the
e flocks in some of the other Australasian colonies. The loss
r 1892 was 4,190,120, due chiefly to drought in the extreme
gions. In 1895 there was again a loss of no less than
by drought, which was general throughout the colony; in

the following year, 1,457,800 sheep were lost through the seas
1897, drought was again responsible for the loss of 2,985,100
the year 1898, as stated on page 574, saw a further loss of
3,000,000 from the same cause:—

Year.	Expected increase, allowing for all causes of natural decrease.	Actual increase or decrease.	Loss through Seasons.	Year.	Expected increase, allowing for all causes of natural decrease.	Actual increase or decrease.	th Se
1874	3,807,000	3,807,000	†	1886	3,409,000	1,348,000	2,0
1875	2,556,000	2,556,000	†	1887	7,796,000	7,796,000	
1876	1,915,000	* 84,000	1,999,000	1888	2,435,000	*462,000	2,
1877	1,802,000	*3,748,000	5,550,000	1889	5,339,000	3,603,000	1,7
1878	3,958,000	3,958,000	†	1890	5,880,000	5,880,000	
1879	4,583,000	4,583,000	†	1891	5,845,000	5,845,000	
1880	5,335,000	5,335,000	†	1892	439,120	*3,751,000	4,1
1881	2,947,000	1,194,000	1,753,000	1893	‡488,926	*1,099,426	6
1882	1,797,000	* 477,000	2,274,000	1894	672,282	*3,418	6
1883	3,193,000	1,801,000	1,392,000	1895	‡4,446,260	*9,359,560	4,
1884	1,883,000	*6,255,000	8,138,000	1896	2,158,900	701,100	1,4
1885	6,160,000	6,160,000	†	1897	‡1,380,800	*4,365,900	2,

* Decrease during the year. † No loss, or, if any, very slight. ‡ Expected decre

After allowing for the causes which naturally impede the in
in the flocks of the colony, the demands of the slaughter-yar
requirements of the neighbouring colonies, and the deaths occ
from other causes than drought, it will be found that the r
annual increase may be as high as 20 per cent., so that it
sible for the flocks of the colony to increase two fold in abou
years. Actual experience shows that such rate of increase ha
been approached once since the year 1861. During the period
years from 1861 to 1866 there was a two fold increase; and the
of the colony were again doubled in the eight years from 1866 to
and in the thirteen years from 1874 to 1887. How many sheep
be sustained by the colony under a system of artificial feedin
watering may hereafter become a question of national interest: bu
abundantly plain that with a succession of fair seasons it wou
impossible, under the present mode of despasturing stock, for the
to support for any number of years an increase of sheep similar t
experienced in 1891, as in nine years' time the flocks would in
from the present number of 43,953,000 to 103,637,000 a total
to that now found in all Australasia. The stock-carrying capa
of the colony are, however, very difficult to estimate, as by f
greater portion of the country is yet in its natural state. Im
ments, such as a better system of water conservation and irrigati
intelligent extension of the growth of salt bush, cotton-bush, and
drought resisting shrubs and natural grasses, and the cultivat
artificial fodder, are gradually being effected, and will indefinitely
the capacity of the colony for supporting stock of all descriptions

he export and import of sheep during the last ten years is shown
w. The figures for several years are somewhat in excess of the
h. as sheep are often crossed from one colony to another for the
enience of station-holders, or in search of grass, and not for
oses of trade :—

Year.	Exported.	Imported.	Year.	Exported.	Imported.
1888	2,327,406	254,018	1893	933,012	1,017,252
1889	1,217,325	832,565	1894	905,783	530,664
1890	2,987,902	598,077	1895	909,773	420,374
1891	1,615,964	663,044	1896	744,578	1,010,176
1892	1,583,666	520,680	1897	1,022,295	1,171,794

he demand for sheep for local consumption was until recent years
mall compared with the supply that it did not appreciably affect the
rease of the flocks of the colony. This, however, is not now the
e: the annual demand for food consumption within the colony is
ut 7 per cent. of the number of sheep depastured—equal to three-
enths of the cast. The number slaughtered for export in a frozen or
served state, and for tallow, brings up the total slaughtered to rather
re than 13 per cent. of the entire flocks.

The following table gives the number of sheep in the Australasian
nies at the end of 1897, and the proportion owned in each colony :—

Colony.	Sheep.	Proportion owned in each Colony.
	No.	per cent.
New South Wales	43,952,897	42·46
Victoria	13,180,943	12·73
Queensland	17,797,883	17·19
South Australia	5,092,078	4·92
Western Australia	2,210,742	2·14
Tasmania	1,588,611	1·53
New Zealand	19,687,954	19·03
Australasia	103,511,108	100·00

It will be seen that New South Wales stands first of all the colonies
a sheep-breeding country. But whilst Victoria has nearly reached
e limit of its natural capabilities in this particular direction,
onsiderable proportion of its area being now devoted to agri-
ture, New South Wales has not yet approached that limit. In
eensland, as in South Australia, sheep-breeding does not absorb
attention of pastoralists to the same extent as in New South
les. The former colony is more adapted to the breeding of cattle,
ilst in the southern and more settled districts of South Australia
ater attention is paid to the cultivation of cereals, its northern

territory, like that of Queensland, being more adapted by natur the breeding of cattle and horses. Western Australia is at pre in the early stage of its colonisation; much of its area is s unknown, and it is therefore impossible to estimate its future a sheep-breeding country. It may, however, be surmised that the south portion of its immense territory will, in time to come, be stocked wi sheep, whilst the northern portion will probably be found more suital for the breeding of cattle and horses, on account of its resemblance portions of Queensland and the northern territory of South Austra situated under the same latitude. It was thought at one time t cattle-breeding would occupy a position in New South Wales equal that of sheep-breeding, but experience has shown that the gene climatic conditions are more favourable to sheep than to cattle, and t colony is probably destined to remain what it now is—the great she breeding centre of Australia.

The different degrees of success attending sheep farming in vari parts of the country have long since directed attention to the fact t every part of Australia is not equally fitted for the production of t wools. New South Wales may be divided climatically into four zones (1) The coast country extending from the seaboard to the main ran the breadth of which varies from 20 to 100 miles: (2) the table-l districts on the summit of the range; (3) the upper part of the west slopes; and (4) the interior, or "salt-bush country."

The climate of the eastern seaboard for a considerable distance inl is too moist, and a large portion of it too poor, for the adequate sustena of merinos, but it is probable that the coarser breeds of sheep would deteriorate through the limited food supply and the rugged nature of country. On the Hunter and other northern rivers, and in the south coast districts, where the soil is very rich, dairy-farming and agricult are the leading, and, no doubt, the most profitable industries. Sh breeding is carried on to some extent in the regions towards the sum of the coast range; but, as in the case of the country near the sea, soil as a rule is unfavourable to sheep. On crossing the coast ran however, the contrast between the aspect of the country just ente and that left behind is very striking. Here the grazing and w growing capabilities are at once apparent, and farther to the westw a still greater improvement is visible.

In the abundant pastures of the Riverine districts the wool is less than in the country immediately west of the table-lands, but the fle are generally sound and heavy. Farther in the salt-bush country wool suffers both in the weight of the fleece and in its quality; but country is fattening, and the stock are generally more healthy than t nearer the sea. In the country on the other side of the Darling great summer heat is adverse to the production of heavy fleeces; but e there a fair class of wool is produced, as the stock-owners are consta introducing fresh blood, and so counteracting the tendency towards degeneration of the breed of sheep which otherwise might ensue.

The importation of stud sheep from foreign countries, notably France, ermany, and America, which was continued for many years after the perfine quality of Australian wool had been established in the markets the world, practically ceased even before importation was legally probited: for it had become apparent that the fleece, instead of showing gns of deterioration under the influence of the climate, had, on the hole, a tendency to improve. The introduction of sheep and cattle to New South Wales was forbidden for many years, owing entirely to e fear of the stock-owners that their flocks and herds might be contaminated by scab and other diseases prevalent in European flocks; but ese restrictions were removed at the beginning of the year 1888, and ere is now an import of pure-bred sheep from the United Kingdom, e United States, France, and Germany. So far, the breed imported as been chiefly the merino; but Lincoln, South Down, Vermont, hropshire, and other well-known breeds have been introduced. In the ourse of the year 1897 the stud sheep imported from the other ustralasian colonies numbered 5,797; while 48 stud rams and 49 ewes ere introduced from America, and 16 rams and 23 ewes from Germany.

It is now generally admitted that, as far as the fleece is concerned, he Australian merino has little to gain by any further admixture of uropean or American blood, but it is equally admitted that there is oom for improvement in the physique of the animal. To produce a arger carcase, without interfering with the quality of the fleece, many xperiments have been made, but without much success, and it has been ound that the crossing of noted breeds of English rams with Australian wes has invariably resulted, after a generation or two, in a deterioration f the merino. The breeding of sheep for consumption, and for the ake of the wool, has, therefore, developed naturally into two distinct elds of industry. It may here be mentioned that the carcase of the rdinary Australian merino, when dressed, averages about 16½ lb., whereas dressed carcases of the Lincoln or Leicester breed would average 57 to 60 lb. The food qualities of the merino are not appreciated in the London market, and its lean flanks and long fleshless leg bones make its appearance objectionable to the butcher, with the result that the improved prospects of export have induced growers to introduce large sheep for cross-breeding, in order to secure a heavier and more presentable carcase. It remains to be seen, however, how far the pasture and climate of the country hitherto devoted to the merino are suitable to the more gross-feeding cross-breed.

The various breeds of sheep in the colony are the Merino, Lincoln, Leicester, Downs, and Romney Marsh, and crosses of the long-woolled breeds, principally with the merino. At the close of 1897 the respective numbers of merino and long-woolled sheep and cross-breeds stood thus:

Merino	40,065,936
Long-woolled sheep	1,223,581
Cross-breeds	2,663,380
Total	43,952,897

During the last three years the English and cross-bred sheep h increased by one million, while the merinos have decreased in nu from 54,070,781 to 40,065,936. Following is a classification of sheep in the colony at the end of 1897 :—

Merino—			
Combing—			
Pure and stud—Superfine	1,302,910		
Ordinary	4,322,374	5,625,284	
Pure and stud—Medium	2,175,663		
Ordinary	11,160,261	13,335,924	
Pure and stud—Strong	2,265,709		
Ordinary	7,784,888	10,050,597	
Total Combing			29,01
Clothing—			
Pure and stud—Superfine	383,446		
Ordinary	1,211,460	1,594,906	
Pure and stud—Medium	585,332		
Ordinary	5,360,492	5,945,824	
Pure and stud—Strong	806,788		
Ordinary	2,706,613	3,513,401	
Total Clothing			11,05
Total Merino			40,06
Long-woolled—			
Pure and stud—Lincoln	200,317		
Ordinary	496,229	696,546	
Pure and stud—Leicester	166,156		
Ordinary	276,867	443,023	
Pure and stud—Southdowns	5,650		
Ordinary	5,240	10,890	
Pure and stud—Shropshire Downs	12,459		
Ordinary	12,109	24,568	
Pure and stud—Hampshire Downs	....	21	
Pure and stud—Romney Marsh	21,604		
Ordinary	26,881	48,485	
Pure and stud—Cotswold	....	46	
Pure and stud—Cheviot	....	1	
Pure and stud—Dorset Horn	....	1	
Total Long-woolled			1,22
Crosses—			
Long-woolled with Merino			2,66
Grand Total			43,95

The sexes and classes of sheep at the end of 1897 were estimate follows :—

Rams	671,052
Ewes	20,949,616
Wethers	15,952,928
Lambs	6,379,301
Total	43,952,897

mate of New South Wales admits of stock of all kinds being e open air, and there is no necessity for housing them during r months. The sheep are either kept in paddocks or under the epherds, though on some stations they are both shepherded and d. At the end of 1897 there were :—

Paddocked	43,198,554
Shepherded	195,160
Paddocked and shepherded	559,183
Total	43,952,897

vantages of the paddocking system are now universally recog- e country will carry one-third more sheep ; the wool will be d sounder, and the fleece as a whole one-third better; the feed eaner and less liable to grass-seed ; the sheep will increase in y will live longer and continue longer profitable; they will be n foot-rot and other diseases ; the expense of working the ill be less than a quarter of what it would be if the sheep were d ; and finally, the owner will be able to devote the principal is time to improving his sheep, instead of spending it in g to manage a number of shepherds and hut-keepers. lso been found that the percentage of lambing is higher among l than shepherded sheep. The percentage of lambs obtained from n Australia is, however, far lower than that experienced in the ingdom, where the ratio on account of twin lambs has been exceed 160 per cent., and over a series of years, amongst the cks, considerably exceed 130 per cent. This result is doubt- o the much greater care and attention bestowed on English he lambing season. During the year 1897, the lambs marked outh Wales numbered 6,708,043. In his annual report, the pector of Stock states that the number of ewes put to the 14,782,469, which would give an average lambing of 45·38

r 1896 closed with a total of 48,318,790 sheep ; the increase g during the season was 6,708,043 ; and 1,171,794 sheep were making a total of 56,198,627. On the other hand, 1,953,984 ghtered for food for local consumption in the population centres e year; 1,154,506 were killed for food on stations; 750,282 n by the meat-preserving works; 1,065,990 were frozen for 77,914 were boiled down for tallow at boiling-down works, and ere similarly treated on stations. In addition to these, 119,258 e killed for local food consumption, bringing the total number d during the year to 5,670,845: and during the year 1,022,295 were exported, 251,472 were killed by dogs, and 5,301,118 in consequence of the dry season and of ordinary mortality. se from all causes amounted, therefore, to 12,245,730, leaving r of sheep on the 31st December, 1897, at 43,952,897, or a decrease of 4,365,893 from the number depastured at the end of the previous year. The mortality set down above, viz., 5,301,118, is 10·97 per cent. of the total flocks depastured. The normal death-rate of sheep is 5 per cent.

The relative advantages and profitableness of sheep-rearing and wheat-farming have been the subject of much discussion. The question is one, of course, to be settled largely by the circumstances of climate and soil; but while it is true that many districts unfit for cultivation are suitable for grazing, it may be said that the more suitable a district is for cultivation the greater are its capabilities for pastoral purposes, and in such circumstances the best results can be secured by the combination of both pursuits. Not only are wheat-fields fertilised and kept free from noxious vegetation by sheep, but the animals are better fed than is otherwise the case, and the risk of heavy stocking is reduced by utilising the cultivated land. Sheep turned on the land after the stripper has been used knock down the straw, eat the greater portion of it, and tread the rest in the soil, so that it is easily covered by the plough, and the weeds and other vegetation which spring up after the autumn rains make good feed. Many farmers turn on the sheep again when the grain crop is a few inches high--a plan which, in addition to benefiting the sheep, proves advantageous to the crop, making it stronger and more productive, and enabling it to withstand the dry weather later on. The stubble field being available just when the summer grass is getting scarce, the sheep which would otherwise become poor are kept in good condition to face the winter. Sheep grazed on cultivated lands are remarkably healthy, and there is no better means of keeping them free from disease: fluke and worms are almost unknown, and there is considerably less foot-rot found amongst them. To what extent the stock-carrying capacity of the land is improved by cultivation it is difficult to say, but on good average land it may be put down at 25 per cent. On the whole, it may safely be said that with one-third or one-fourth of its area broken up, land will carry as many sheep on the portion not broken up as the whole area would carry in its natural state, and without taking into consideration the value of the crops harvested, the return derived from grazing alone would be larger than if sheep-rearing were followed by itself.

For many years experiments with lucerne as an adjunct to the natural herbage have been successfully carried on, and in fairly rich soil with good drainage its cultivation is strongly recommended. But it is strange that, with a view to fully utilising all available means of subsistence and thus providing for the fullest stocking capacity of the land, so few pastoralists turn their attention to root crops for feed—such as turnips, mangolds, sugar-beet, and carrots. Of course it is evident that many areas are entirely unsuitable for such crops, but pastoralists and farmers more favourably situated might, in addition to supplying their own needs, provide feed which would be eagerly availed of by those less favoured. These crops would become doubly e, as sheep travelled from the dry country could be depastured paddocks and fed with the roots, leaving in the form of manure rals of the valuable constituents extracted from the cropped ljoining, so that the owner would not only be fully paid for his e, but at the same time get paddock after paddock fertilised horough manner for succeeding crops. Large areas in New d, Orange, Wellington, Tumut, Jerilderie, and other districts on leland and western slope, are available for such cultivation, and astoralists in the dry west discovered that they could bargain for ent for portion of their stock, instead of travelling them almost sly in search of natural herbage as at present, the fear of drought to a large extent disappear. It seems apparent, then, that the adoption of cultivation in connection with grazing is destined a great part in preserving the flocks of the colony from the of unfavourable seasons.

Wool.

quantity of wool, the produce of New South Wales, exported 1870 and subsequent periods ending with 1897, is given in the ed table. A large proportion of the clip is exported to Europe, adjacent colonies, as already alluded to in the chapter on Com- During 1870 nearly 46 per cent. of New South Wales wool was l from ports outside the colony, but in 1897 the proportion had d to 23 per cent. The weights given are on the assumption that wool was shipped in grease :—

N. S. Wales ports.	Victorian ports.	S. Australian ports.	Queensland ports.	Total.
lb.	lb.	lb.	lb.	lb.
34,608,600	20,411,889	8,787,126	....	63,807,615
48,635,622	55,305,262	9,184,725	150,000	113,275,609
99,011,710	63,367,669	11,298,297	404,598	174,082,274
132,539,441	45,311,695	8,215,265	387,986	186,454,387
122,901,992	48,597,092	22,923,412	297,037	194,719,533
159,704,606	58,687,888	21,718,339	112,762	240,223,595
188,990,931	59,155,698	8,121,721	28,839	256,297,189
183,881,857	74,857,400	25,372,201	126,804	284,238,262
168,836,103	70,808,013	17,475,612	55,104	257,174,832
255,204,601	81,689,892	19,731,728	470,733	357,096,954
241,963,380	78,382,868	15,501,210	771,204	336,618,662
247,734,888	76,883,635	18,396,368	979,400	343,994,291
264,872,092	73,427,131	19,121,856	715,917	358,136,996
244,437,310	63,661,684	14,540,735	625,916	323,265,645
211,802,106	63,794,830	20,192,922	464,590	296,254,448
216,479,049	51,704,887	12,662,236	328,017	281,174,189

The proportion of the total clip reaching New South Wales port compared with that which was despatched by way of Melbourn Adelaide, and Brisbane, was as follows :—

Year.	Shipped from New South Wales ports.	Shipped from other Australian ports.	Year.	Shipped from New South Wales ports.	Shipped from other Australian ports.
	per cent.	per cent.		per cent.	per cent.
1870	54·2	45·8	1890	65·6	34·4
1875	42·9	57·1	1891	71·5	28·5
1880	56·9	43·1	1892	71·9	28·1
1885	71·1	28·9	1893	72·0	28·0
1886	63·1	36·9	1894	73·9	26·1
1887	66·5	33·5	1895	75·6	24·4
1888	73·7	26·3	1896	71·5	28·5
1889	64·7	35·3	1897	77·0	23·0

As the season for exporting wool does not wholly fall within a calendar year, the quantity of wool stated in the table on page 5 for any year consists partly of that season's clip and partly of t previous one. The following table shows the total number of she shorn during the year, distinguishing those whose fleece was wash previous to shearing. It will be observed that most of the sheep a shorn in grease. This was not always the case: at one time nea half the sheep were washed before being shorn. Several circumstan have led to the change, the principal being that the price obtained f washed wool in excess of greasy is not commensurate with the cost washing :—

Year.	Sheep.				Lambs.	
	In grease.	H.-W. and Spout.	Creek washed.	Scoured.	In grease.	Wash-
1880	25,298,211	1,015,556	6,164,859	2,660,141	*	*
1885	28,324,595	38,000	642,424	267,250	4,113,383	42,5
1890	40,935,736	......	1,271,712	580,794	9,285,871	33,5
1891	45,619,967	....	426,201	1,093,886	10,531,106	31,5
1892	46,917,809	......	154,503	1,262,163	7,105,210	132,5
1893	45,348,757	......	81,169	1,007,549	7,482,936	169,6
1894	42,632,425	100,000	88,686	3,001,835	7,948,101	463,9
1895	38,925,708	....	23,006	1,857,663	4,731,387	147,8
1896	37,409,296	......	2,793	2,193,011	5,857,382	535,1
1897	36,206,151	....	......	2,306,097	3,725,278	192,2

* Not recorded.

The average weight of fleece obtained during the ten years end 1897 from sheep shorn in grease would appear to have been 5 lb. 12 while creek washed yielded 3 lb. 2 oz., and scoured 3 lb. 3 oz. Duri the same period lambs' fleeces seem to have averaged 1 lb. 15 oz. grease, and 1 lb. 6 oz. when washed. Although the number of she shorn last season was smaller than in the preceding year, the aver f fleece was higher. The great improvement in the weight eece during the last twenty years may be seen from the table low ; and in connection with this matter, it may be pointed sheep-owners who until recently were unable to secure good ve been enabled, in consequence of the low prices ruling at the les during the last few years, to improve their flocks by the n of superior stud rams. The table has been compiled from al reports of the Stock Department, and the figures are given they may be worth ; they do not quite agree with results in another way :—

Estimated Average Weight of Fleece from Sheep shorn— In the grease.		Scoured.		Year.	Estimated Average Weight of Fleece from Sheep shorn— In the grease.		Scoured.	
lb.	oz.	lb.	oz.		lb.	oz.	lb.	oz.
4	0	…………		1888	5	6½	2	9½
5	0	2	4⅓	1889	5	13½	2	14
5	1	2	10	1890	5	11¾	3	4½
5	7	2	9½	1891	5	9	3	7
5	0	2	8⅛	1892	5	6	3	2
5	0	2	9½	1893	5	15	3	5
5	2	2	12	1894	6	1½	3	5½
5	0	2	14	1895	5	11½	3	5
5	7½	3	0	1896	6	4	3	4¼
5	5⅓	2	14	1897	5	12½	3	4
5	9	2	14					

years so much consideration has been given to the question ng that, in spite of the bad seasons experienced, the wool clips a very good ; and notwithstanding the greatly diminished flocks t three years, the total production of wool, though smaller than e previous five years, has not by any means decreased propor- . For the five years, 1890–94, the average flocks were 0, and the average annual production of wool was 337,000,000 to, taking the whole flocks, an average of 5·8 lb. per head. last three years, 1895–97, the average annual flocks were only 00, and the average annual yield of wool was 304,000,000 lb., about 6·5 lb. per head. While, therefore, the flocks have 19 per cent., the total production of wool has fallen off barely nt. The clips of the seasons 1893–4 and 1894–5 are the highest l ; but with two really good seasons the results then achieved ost likely be surpassed.

is put up at the stations in packs of various sizes from 4 ft. 6 in. 2 in. to 5 ft. 3 in., weighing from 10 lb. to 12 lb. On forty-two the bales are "dumped" in a hydraulic press before leaving. reduced to less than half their original length. A bale of ool averages about 390 lb. in weight, and a bale of washed wool 0 lb.

The 1898 lambing has been estimated by the Stock
7,567,000, or an average of 52¼ per cent. of ewes put to
which is nearly 10 per cent. higher than the average for 1897.
these will all become good stock is very questionable. Bad
only carry off the ewes, but the lambs which survive bear
of early hardship. The majority of the flocks were shorn in
of September and October, and since then six or seven
has been experienced, the effects of which have been
flocks have had to be travelled from the plains to the
of pasture; this will not improve the wool, and even should
be enjoyed, there will be the inevitable "break" in the staple.
reduced lambing may be expected during 1899, so that the
the season 1899–1900 is by no means bright. There will
diminished yield of wool this season, the decrease
estimated at from 20,000 to 50,000 bales. Probably the
about 40,000 bales short of last year's production.

VALUE OF THE WOOL CLIP.

The wool clip of Australasia is its most important item
and it may be said that the prosperity of the colonies in a
depends upon the state of the wool market. The following
marises the export trade in New South Wales wool during
1860–97, and illustrates the growth of that important
thirty-eight years, whilst at the same time the fluctuations
of the clip may be easily followed. The weights given
actual exports, washed and greasy wool being taken

Year.	Quantity.	Total Value.	Year.	Quantity.
	lb.	£		lb.
1860	14,962,362	1,454,289	1879	123,710,450
1861	18,171,209	1,768,978	1880	154,871,832
1862	20,988,393	1,801,186	1881	139,601,506
1863	15,842,520	1,316,520	1882	146,221,182
1864	25,827,917	2,294,615	1883	188,161,710
1865	29,858,791	2,283,560	1884	173,986,303
1866	36,980,685	2,830,348	1885	168,151,659
1867	27,327,452	2,125,737	1886	173,985,640
1868	27,067,256	1,960,360	1887	216,450,342
1869	51,269,672	3,162,522	1888	235,848,944
1870	47,440,610	2,741,141	1889	261,853,484
1871	65,611,953	4,748,160	1890	236,322,828
1872	50,233,453	3,342,900	1891	331,887,720
1873	62,998,692	3,936,408	1892	312,225,293
1874	75,156,924	5,010,125	1893	318,782,858
1875	87,534,280	5,651,643	1894	331,774,424
1876	100,736,330	5,565,173	1895	297,448,104
1877	102,150,246	5,256,038	1896	272,033,262
1878	111,833,017	5,723,316	1897	258,514,280

·xamination of the preceding figures at once shows how greatly ·tuations in the value of the staple article of export affect the ıl prosperity. For instance, the exports for the years 1884 and vhich may be taken as practically equal in quantity, represented · of £8,953,100 in the former year, and of only £7,028,600 in ter year. Again, comparing 1883 with 1894, there was a differ- quantity in favour of the latter year of 143,612,714 lb., and had ces of 1883 been obtained the value of the 1894 clip would have ed that of the former year by £7,272,400, whereas there was an decrease to the amount of £586,971. In 1895, however, there rise in price, and the value of the exports in that year was ,690 instead of £8,055,885, which the quantity shipped would epresented at the average price of 1894. On the basis of the s values, there was a further rise in 1896, but in 1897 the aver- ue was not so high, although still greater than in 1895. Viewing le as a whole, although during the period under examination the of wool has greatly fluctuated from one year to another, the cy to a settled diminution of price is unfortunately too clearly ible. It is satisfactory, therefore, to know that the market at sent time is firmer than it has been for some years past.

me time almost all the wool used to be shipped on grower's account ld in London, but of late years the proportion sold in the local s has very largely increased, and European purchasers are realising antages of buying on the spot. The increasing importance of the wool sales will be manifest from the following figures: —

son.	Total deep-sea exports from Sydney and Newcastle.	Sydney Wool Sales.		
		Offered.	Sold at auction and privately.	Proportion of deep-sea exports sold in Sydney.
	bales.	bales.	bales.	per cent.
7-88	396.772	227,466	162.511	40·96
8-89	450.095	268.264	209,252	46·49
9-90	465,835	268,790	234,419	50·32
0-91	566,680	333,876	251,314	44·35
1-92	630,115	361,880	278,304	44·17
2-93	637,758	398,010	362,365	56·82
3-94	719,620	452,571	401,830	55·84
4-95	755,769	488,509	425,135	56·25
5-96	683,001	441,437	415,538	60·84
6-97	690,034	437,284	401,138	58·13
7-98	635,002	443,066	445,865	70·19

he 445,800 bales of wool sold in Sydney during the last season, be said that approximately 323,200 bales were purchased for the ent of Europe, 66,900 bales for the English trade and for London ·ulative account, 14,500 bales for America, 4,400 bales for Japan dia, and 36,800 bales by local scourers. The average prices per ealised in Sydney during the last five years were £10 2s. in

1893-4, £8 10s. in 1894-5, £10 2s. 6d. in 1895-6, £10 5s. in 189 and £10 8s. in 1897-8 ; while in the London market an averag £11 10s. was obtained in 1894, of £11 in 1895, of £12 in 1896, of 10s. in 1897, and of £12 5s. in 1898. The higher prices average London are partly accounted for by the quantity of wool, such as lo pieces, etc., sold at low rates in Sydney, and scoured prior to shipm

The prices realised for the different descriptions of wool at the Syd wool sales during the last two seasons are given below :—

Description.	Superior.		Good.		Medium.		Inferior.	
	1896-7.	1897-8.	1896-7.	1897-8.	1896-7.	1897-8.	1896-7.	1
Greasy—	d. d.	d. d.	d. d.	d. d.	d. d.	d. d.	d. d.	d.
Fleece ..	8¼ to 11¾	9¼ to 12¼	7¼ to 8¼	7½ to 9	6¼ to 7	6 to 7	4¾ to 6	4¼
Pieces ..	7 „ 8¼	7½ „ 8½	6 „ 6¾	6 „ 7¼	5 „ 5¾	4¾ „ 5¼	3¼ „ 4¾	3¼
Bellies ..	5½ „ 6½	5½ „ 6¾	4½ „ 5¼	4 „ 5¼	3¾ „ 4¼	3¼ „ 3¾	2¼ „ 3¼	2¼
Lambs ..	8 „ 11¼	8 „ 12¾	7¼ „ 7¾	6¾ „ 7¼	5¼ „ 7	5¼ „ 6½	3½ „ 5¼	3¾
Crossbred..	8¼ „ 10½	8 „ 9½	7¼ „ 8	6¾ „ 7¼	6¼ „ 7	5¾ „ 6¼	5 „ 6	4¾
Scoured—								
Fleece ..	14¾ „ 16½	15¼ „ 18	13¼ „ 14½	13 „ 15	12 „ 13	11 „ 12½	10¼ „ 11¾	10
Pieces ..	11¼ „ 13½	11¼ „ 16	10¾ „ 11½	10½ „ 11¼	9 „ 10¼	9 „ 10¼	8 „ 9¼	7¼
Bellies ..	10¾ „ 13¾	11 „ 15¼	9¾ „ 10¾	9¼ „ 10¾	8¾ „ 9½	8¼ „ 9	7 „ 8¼	7
Locks ..	8¼ „ 11¼	8½ „ 11¾	7¼ „ 8	7 „ 8¼	6½ „ 7	6 „ 6¼	5¼ „ 6¼	4¼
Washed—								
Fleece* ..	......	......	9 „ 9¾	......	......	....	. ..	..

* Washed fleece has almost disappeared from the market.

In order to illustrate the fluctuations in the value of this staple du the last sixteen years, the following table has been compiled, and give a fairly correct idea of the average value realised for greasy wo the London market. The values given were those ruling at the principal sales of each year until 1894, and at the six sales in 1 1895, 1896, and 1897 :—

Sales	1882.	1883.	1884.	1885.	1886.	1887.	1888.	18
	d.	d.	d.	d.	d.	d.	d.	d
1st Series	10½	10	9½	9	7½	10½	8	[illegible]
2nd „	10½	10	9½	8½	6	10	8	[illegible]
3rd „	10	9	9½	8	8	9	8	1
4th „	10	9½	10	7	11	8¼	8½	1
5th „	10	10	9½	7½	10	7½	8½	11

Sales	1890.	1891.	1892.	1893.	1894.	1895.	1896.	18
	d.	d.	d.	d.	d.	d.	d.	d
1st Series	10½	9	7¼	8	6¾	6	8¾	[illegible]
2nd „	10	10	8	8½	6¾	6½	9¼	[illegible]
3rd „	9	9½	7½	7¾	6¼	6¾	8½	[illegible]
4th „	10	9	7½	8¼	6¾	7¼	8¼	[illegible]
5th „	9	8½	8	7	6¼	8½	7¾	[illegible]
6th „	......	...	...	..	6	8½	8¼	

g the period covered by the foregoing table, Sydney-shipped ool realised from 11¼d. to 6d. The maximum prices were realised 1889, when the sales closed at 11¼d. per ℔. Prices opened at 1882, and were fairly well maintained until the following year, ey began to decline rapidly until the lowest market was reached econd series of 1886, when greasy wool realised as little as 6d. at the end of that year, however, the prices had considerably d, greasy wool selling at 10d. These prices have been exceeded e since—at the December sales of 1889, when, as before stated, e obtained for greasy wool was 11¼d. Since 1890 the price of wool has ranged from 10½d. at the beginning of that year to 6d. ixth series of 1894, and the first series of 1895. The first sales of ened at 7¼d. : there was considerable fluctuation in the course ear, the sales ultimately closing at 7¾d.

rices of the last three years have shown a satisfactory advance e of 1894, although they experienced a fall in 1897 ; and as the f the drought make themselves more strongly felt it is highly e that wool-growers will be compensated to some extent for cent losses. Stocks in Europe are light, and with a prospective e in the Australasian clip, prices should continue to rise. There ause to view unfavourably the further extension of the pro- of wool in these colonies. In the ancient seats of wool- g, production is now stationary, and in some of the areas r devoted to this industry, many causes, both climatic and se, are likely to offer serious checks to its extension, while popu- with the consequent demand for wool, is everywhere increasing. ol supplies of the world have of late years shown no material e, and there are no signs of an increase of production in the ture ; for any advance in the quantity of wool available from lia after the passing away of the effects of the recent drought, or e River Plate, will probably be more than counterbalanced by a ed production in Great Britain, North America, and the Con- of Europe. The establishment of a market for Australian wool n is now claiming attention, and it is not too much to expect e shipments to Eastern countries will show a satisfactory increase early future.

a moot question whether the climate of New South Wales is dapted to the production of a combing than a clothing wool. gh the former is looked upon with most favour by wool-growers, nerally recognised that there are very large tracts of country, lly where the salt-bush predominates, on which it is difficult to good combing wool, and where it will probably be found more le by wool-growers to give greater attention to the cultivation lothing variety.

quantity and value of wool, the produce of each of the various s of Australasia, exported during the year 1897, will be found hereunder. The weights given are on the assumption that all the was shipped in grease:—

Colony.	Quantity.	Value.
	lb.	£
New South Wales	281,167,119	8,027,704
Victoria	56,606,943	2,035,082
Queensland	86,462,543	2,498,925
South Australia	36,201,315	963,930
Western Australia	12,736,534	295,646
Tasmania	8,131,333	264,420
New Zealand	144,205,558	4,442,770
Australasia	625,511,345	18,528,477

The figures represent the net exports of the various colonies, those given for New South Wales are therefore slightly different the figures given on page 585, which show the exports of dom produce as per Customs returns.

CATTLE.

Though still a most important industry, cattle-rearing does not occupy so prominent a place as formerly. The number of horned c returned at the end of each year since 1861 is shown in the subjo table. It will be noticed that there was a great decline in the from 1875 to 1885, but that the number steadily increased from 1 to 1894, when it stood at 2,465,411. The drought experienced in the last three years, however, has been the chief cause in produci liminution in the number despastured, the figures for 1897 being 2,085,096:—

Year.	Cattle.	Year.	Cattle.	Year.	Catt
1861	2,271,923	1874	2,856,699	1887	1,575,48
1862	2,620,383	1875	3,134,086	1888	1,622,9
1863	2,032,522	1876	3,131,013	1889	1,741,5
1864	1,924,119	1877	2,746,385	1890	2,091,2
1865	1,961,905	1878	2,771,583	1891	2,128,8
1866	1,771,809	1879	2,914,210	1892	2,221,4
1867	1,728,427	1880	2,580,040	1893	2,269,8
1868	1,761,411	1881	2,597,348	1894	2,465,41
1869	1,795,904	1882	1,859,985	1895	2,150,05
1870	2,195,096	1883	1,640,753	1896	2,226,16
1871	2,014,888	1884	1,425,130	1897	2,085,09
1872	2,287,660	1885	1,317,315		
1873	2,794,327	1886	1,367,844		

above figures be compared with the returns of sheep for the same will be found that the change which has taken place in the class has been most remarkable. It is very debatable whether the ion of sheep for cattle will in the end prove advantageous to the ough there does not appear to be any doubt that sheep-breeding sent more profitable to the individual owner. The decrease in ber of cattle depastured in the colony during 1897, compared 5, was 1,048,990. The lowest point in cattle-raising was reached the result, no doubt, of continued bad seasons. Since then ovement has been gradual, and, even if small, it may be taken nce of the disposition of the pastoralists in some parts of the revert to cattle-breeding in place of sheep. The decrease since been chiefly due to the dry seasons.

act statement of the loss of cattle from disease and failure of d grass can be made for fifteen years. Of these years, six may lered as having been favourable to stock, and six disastrous, the other three years the losses have not been large. The table shows the number of cattle lost through unpropitious r disease. The cause of most of the losses was failure of grass r; but in some years, notably 1890, the stockholders suffered by the prevalence of the opposite condition of too much rain, various forms of disease fatal to stock:—

Expected Increase, allowing for all causes of natural decrease.	Actual Increase or Decrease.	Loss through Seasons.
114,900	*219,200	334,100
64,100	*215,600	279,700
30,600	*107,800	138,400
66,800	50,500	16,300
207,600	207,600	†
82,600	47,400	35,200
118,700	118,700	†
299,500	167,400	132,100
137,300	137,300	†
100,727	100,727	†
92,493	48,393	44,100
195,559	195,559	†
‡150,113	*315,354	165,241
76,106	76,106	†
‡80,522	*141,097	60,575

during the year. † No loss, or, if any, very slight. ‡ Expected decrease.

2 P

The principal breeds of cattle now in the colony are the Durh Shorthorns, Hereford, Devon, Black-polled, Ayrshire, Alderney, J and crosses from these various breeds. At the close of the year the numbers of each breed, as far as could be ascertained, were :-

Shorthorns—		
Pure and stud	49,922	
Ordinary	639,758	
		689,680
Hereford—		
Pure and stud	27,907	
Ordinary	182,416	
		210,323
Devon—		
Pure and stud	10,351	
Ordinary	60,115	
		70,466
Black-polled—		
Pure and stud	1,055	
Ordinary	6,000	
		7,055
Red-polled—		
Pure and stud	58	
Ordinary	1	
		59
Ayrshire—		
Pure and stud	4,937	
Ordinary	30,425	
		35,362
Alderneys—		
Pure and stud	1,544	
Ordinary	5,437	
		6,981
Holstein—		
Pure and stud	93	
Ordinary	376	
		469
Jersey—		
Pure and stud	2,176	
Ordinary	9,538	
		11,714
Crosses (estimated):—		
Shorthorn and Hereford	293,020	
Shorthorn and Devon	139,300	
Hereford and Devon	59,577	
Shorthorn and Black-polled	19,040	
Ayrshire and Shorthorn	56,966	
Alderney and Shorthorn	582	
Jersey and Shorthorn	2,414	
Unrecognisable	363,721	
		934,620
Total		1,966,729

There were, in addition, 118,367 head not classified, which we the most part in the towns.

There has been a comparatively large increase in the numb milking cattle, as many of the stockowners, principally in the c turning their attention to dairying instead of fattening and it is believed that this change will continue and in general throughout the colony, as dairying, when properly yields very satisfactory returns. The number of milch cows 498. Further particulars in regard to the dairy industry d on page 613.

l of cattle throughout the colony is steadily improving—a o the introduction of good stud stock, to greater attention ercised in selection and breeding, more particularly for rposes; and to culling and keeping in paddocks. In only he sixty-five sheep districts of the colony is it reported that al deterioration in the quality of the cattle, accounted for by o breeding. Cattle are for the most part kept in paddocks. er shown on page 594, 1,605,184 are paddocked, 226,046 are s, and the remainder, 135,499, are depastured both ways.

he year 1897, 233 pure-bred cattle were imported, chiefly er colonies of the group. Importations from Europe and re prohibited for many years, owing to the natural dread of ners lest their herds should contract diseases which have he cattle of other countries. The prohibition was removed d cattle are now admitted after strict quarantine. The admitted in 1897, included in the above figures, was 2—ulls.

ber of breeding cows in 1897 was estimated at 695,000, of 98 were dairy cows. The calves branded numbered 300,174. on was unfavourable to stock, about 60 per cent. of calves been a reasonable expectation. It is, therefore, plain that umber of instances the calves have not reached the age when ually branded. This was certainly the case with a large f the calves dropped by what are termed dairy cows.

n cattle, probably because they live in a more natural state, bly free from milk-fever and other complaints attendant on large number of calves are reared on separated milk, to le pollard or grain is added; but better results have been providing a foster-mother, three to four calves being allowed

HORSES.

ia is eminently fitted for the breeding of most descriptions d attention has long been directed to this industry. At an l the stock of the country was enriched by the importation ellent thoroughbred Arabians from India, and to this cause ame which was acquired by the horses of Australia was The abundance of good pasture everywhere obtainable great importance. The native kangaroo-grass, especially ed, is full of saccharine matter, and young stock thrive upon it. This abundance of natural provender allowed of ease in the stock of the settlers, which would have been of

great advantage had it not been that the general cheapness of l
to a neglect of the canons of breeding. In consequence of the
of gold, however, they became very high priced. Under ordi
ditions this circumstance would have been favourable to tl
and such was the case in Victoria. But in New South Wal
far otherwise; the best of its stock, including a large prop
its most valuable breeding mares, was taken by Victoria,
result that for twenty years after the gold rush the horse
colony greatly deteriorated. One class of stock only esca
thoroughbred racer was probably improved both by the impor
fresh stock from England, and by the judicious selection of ma
period of deterioration ended about the year 1870, since which v
has been a perceptible improvement in all classes of horses. The
too, steadily increased from 1883 to 1894, when it stood at
Owing to the drought, however, the number in 1895 fell to
but in 1896 there was an increase to 510,636, attributed to i
settlement, more breeding, and fewer sales owing to low pri
1897 the number of horses was 498,034. This is above the
that, under existing conditions, can be profitably utilised in the
but the exports are still few. It is to this over-supply that th
ness of horses is due. In 1895 the average price brought at au
heavy draught horses was £10: but in 1896 the Western A
demand had improved the call, and £1 to £2 more was o
medium draught horses brought £8 to £12, and powerful heav
£16, and sometimes £20. In 1897 the average price for
draught was £13, heavy draught averaging £21, the advance
being due to increased farming operations. Sound, unbroke
horses brought £6 in 1895, while in 1896 they might be h
somewhat lower figure, the demand having decreased in conse
the popularity of the bicycle. In 1897 values remained station
there is now a tendency towards improved prices. Remounts f
realised prices up to £15.

The following table shows the number of horses at the end
year since 1876:

Year.	Horses.	Year.	Horses.
1876	366,703	1887	390,609
1877	328,150	1888	411,368
1878	336,468	1889	430,777
1879	360,038	1890	444,163
1880	395,984	1891	469,647
1881	398,577	1892	484,309
1882	328,026	1893	493,231
1883	326,964	1894	518,181
1884	337,172	1895	487,943
1885	344,697	1896	510,636
1886	361,663	1897	498,034

annual increase in the number of horses has not been greater than er cent. during the twenty-one years covered by the above table, the increase of population during the same period has been at te of 3·72 per cent.

purposes of classification the horses of the colony have been divided raught, light-harness, and saddle horses, the numbers of each parti- kind being as follow :—

Class.	Thoroughbred.	Ordinary.	Total.
Draught	18,473	125,234	143,707
Light-harness	13,758	108,308	122,066
Saddle	26,338	174,702	201,040
Total..	58,569	408,244	466,813

re were 31,221 horses not returned to the Stock Department, and re therefore omitted from this classification.

colony is specially suitable for the breeding of saddle and light s horses, and it is doubtful whether these particular breeds of alian horses are anywhere surpassed. The bush horse is hardy wift, and capable of making very long and rapid journeys when ly on the ordinary herbage of the country; and in times of drought, the grass and water have become scanty, these animals often per- astonishing feats of endurance. Generally speaking, the breed is ving, owing to the introduction of superior stud horses and the ing from good mares. Where there has been a deterioration in tock, it has been due to breeding from weedy mares for racing ses, and to the effect of drought. At the end of the year 1897 it eported by the Inspectors of Stock that in forty of the sixty-five cts into which the colony is divided the horses were improving in ty; in sixteen districts no improvement was shown; while in only districts was there actual deterioration.

e approximate number of animals fit for market is as follows :—

Draught horses	21,948
Saddle horses	34,238
Light-harness horses..........................	21,052
Total	77,238

f these, it is estimated that 19,612 are suitable for the Indian and a markets. The total number leaving the colony for markets out Australasia during 1897 was only 1,865; which was a decrease of from the number shipped in 1896. In 1897 the horses sent to India bered 1,189, as compared with 1,666 in the previous year. The demand for horses in India is considerable, and Australia is a nat market from which supplies may be derived ; but so far the nu shipped has been but small, the speculation of sending horses to country being open to many risks, as, apart from the dangers of voyage, there is always an uncertainty as to the stock being acce As has already been stated, there was a demand from We Australia during the last two years, 773 horses being shipped to colony in 1896, and 305 in 1897. The total outside demand, how is small, and it has not, therefore, been found advantageous to horses to any great extent except for local requirements.

There is a market for horses for military purposes in Europe, a view of the increasing facilities for shipment, and the possibili breeding horses in Australasia superior to those imported from N and South America, Syria, and North Africa, the difficulties in the w capturing part of the European trade should not be unsurmount At the end of 1897 the number of horses in Great Britain was 2,070 as compared with 2,115,557 in the previous year. The number imp into Great Britain in 1895 was 34,092 ; in 1896, 40,677 ; and in 49,519.

PASTORAL PROPERTY.

Pastoral property and stock form the largest factor in the wealt only of New South Wales, but also of all the other principal colon Australasia, and the return derived therefrom is the largest source income of its inhabitants. The total capital value of pastoral pro in the colony, including land, improvements, and plant, as well as was estimated in 1897 to be £116,941,000, of which £42,86 represented the value of land, £45,522,200 that of improvements plant, and £28,557,000 that of stock. The value of land has g fallen during the past few years.

The value of stock does not include dairy cattle and swine : if were added the amount would be £30,668,000, and the total val all pastoral property, £119,052,000. In the above returns is inc the value of improvements on Crown lands under lease to the pas ists, which for the year under review was estimated to be £10,32 The capital value of the leased land is, of course, excluded from the g estimate. From the nature of the industry it is difficult to arri more than a general estimate of the return from pastoral pursuits the point of production : the Sydney values are, however, more ascertained, and these are therefore given in the following esti From sheep the return for the year 1897 was approximately £9,91 excluding the value of tallow : from cattle, excluding dairy pro the return was £910,000 ; from horses, £460,000 ; and tallow, £541 or £11,824,000 in all. If from the total just given be deducted cent., a fair approximation is arrived at of the station value of pa products for the year 1897.

er of stock in each colony at the close of the year 1897 nately as follows :—

ny.	Sheep.	Cattle.	Horses.
ales	43,952,897	2,085,096	498,034
....	13,180,943	1,833,900	431,547
....	17,797,883	6,089,013	479,280
a	5,092,078	540,149	179,792
ralia	2,210,742	244,971	62,222
....	1,588,611	157,486	29,898
....	19,687,954	1,209,165	252,834
a	103,511,108	12,159,780	1,933,607

er of sheep and cattle runs in the colony at the end of 7 was 43,665, of which 39,817 were enclosed, and 3,848 unenclosed; 22,767 of the enclosed runs were properly nto paddocks, and 15,359 were partially subdivided. The sed in these holdings was approximately 166,225,000 42,192,000 acres being freehold, and 124,033,000 acres the State. The improvements effected on pastoral been valued at £45,522,200. Of this sum, fencing 483,810—representing 728,925 miles without wire netting, e rate of £37 10s. per mile, amounting to £27,334,690; miles with wire netting, at an average cost of £66 10s. nounting to £1,149,120. The dams for watering stock 2,919, at an average value of £50; and there were 50,105 nks, worth on an average £152 10s.; while the wells sunk nbered 8,885, the average value of each being £105. Thus ll dams was £2,645,950; of tanks, £7,641,010; and of wells, The value of improvements and plant other than those about £5,818,510, representing ringbarking and buildings, stimated at £1,680,130, and the latter at £4,138,380.

PUBLIC WATERING PLACES.

c Watering Places Act of 1884 (48 Vic., No. 16) came into the 1st January of that year. By this measure the con- l administration of the artesian bores and public watering trusted to the Minister of Mines and Agriculture, and are nder the direction of a superintendent and staff.

successful artesian well sunk in New South Wales was on Station in 1879. The spot selected for the experiment was spring, and after boring 140 feet water was tapped which above the curb, and the flow has continued ever since. The first commenced boring in 1883; but in 1891, on the recommendation of the officer in charge, all the Government augen withdrawn from the field, and since that date the work has been d contract. The prices paid vary somewhat, the range being 15s. 6d. to £1 10s. for the first 500 feet; 15s. 6d. to £1 15s. 1,000 feet; 16s. to £2 up to 1,500 feet; 16s. to £2 2s. 6d. up to feet; £1 5s. to £2 10s. up to 2,500 feet; and from £1 5s. to £ for depths up to 3,000 feet.

Public watering places are established on all the main stock ro the colony. These works consist of dams, wells, and artesian bores. the present time 156 tanks, 23 dams or reservoirs, 30 wells, and 68 a bores are in existence. The tanks have a capacity of up to 5,0 gallons, and in depth they range from 15 to 20 feet. They are so co ted as to be fed during rainy weather by surface drains. The soil fr excavations is embanked around, in order to afford shelter from th and so lessen evaporation, and also, where the contour is favoura conserve water above the ground surface. The total storage capa the tanks and wells above mentioned may be set down at 545,0 gallons, and the wells, if regularly worked, will yield a total of 4 gallons per day. Except at those dams and reservoirs which are o extent and capacity, stock are not allowed direct access to the but are admitted to troughs which are filled by means of reservoirs, into which the water is raised by various methods— horse, or wind power. From the wells the water is mostly dra whims and self-acting buckets. In addition to this supply, Government artesian bores on the various stock routes of the yield approximately 30,000,000 gallons.

Of the dams, tanks, wells, and bores in existence, 210 have b on lease for 5 years, at rentals ranging from £1 to £255, the total receivable by the State being £4,500. After being advertised *Government Gazette* and the local newspapers, the leases are sub to public tender, the condition being that the tenant must co either reside at the watering place himself or provide a resident taker. In either case he may take stock on agistment and depa certain number of his own on the lands appertaining to the lea he is also encouraged to cultivate and improve such lands. permitted to charge a fixed scale for watering stock, viz.: 1d. p for horses, 1d. for cattle, 1d. for camels, ¼d. for goats and pigs, per 100 or portion of 100 sheep. Water may also be sold for d purposes at 6d. per 100 gallons. Seven public watering places hav placed under the authority of trustees or municipal councils, this being permitted by the Act when expedient. In addition to the 45 dams and waterholes are open to the public without any regulations.

Among the uses to which artesian water is being applied is wool-scouring. Its suitability for this purpose has been abun proved by the operations which have been carried on during th three seasons at the Moongulla Bore, on the Collarendabri Road ed there has been awarded a first prize at the Royal Agricul- ty's show, and has also been highly commended by leading wool . Consequent upon the marked success thus achieved, similar have now been begun at the Bulyeroi, Woolabra, Carinda, nia Bores. As an indication that this is now an established applications have been received for the use of water for like t Moree and other bores in the north-west.

ctment entitled the "Artesian Wells Act of 1897" was the end of that year. It provides that any occupier of land, up of occupiers, may petition the Minister to construct an ell, and the necessary distributing channels for water. The are required to consent to the transfer to the Crown of an xceeding 40 acres, embracing the site for the bore, and to pay es as may be assessed by the Land Board for the direct benefit m the water, but such charges cannot exceed 6 per cent. per the cost of the works. Provision is also made for the o take the initiatory steps when a group of settlers are not in . It is enacted that a two-thirds' majority, occupying two- he area of the land to be dealt with, shall rule, and that the nust come into the scheme and pay proportionately with the

LIVE STOCK OF THE WORLD.

st returns respecting the flocks and herds of the world, based furnished in the report of the Statistician to the American t of Agriculture, are given below. The important part e colonies are destined to play in the wool markets of the be better understood when the character of the wool produced ia is made an item of comparison, as well as the actual sheep depastured :—

tinent.	Cattle.	Horses.	Sheep.	Swine.
	No.	No.	No.	No.
....	104,430,000	36,483,000	187,144,000	49,164,000
....	60,847,000	4,279,000	39,922,000	489,000
....	6,095,000	1,239,000	35,589,000	547,000
....	115,497,000	23,203,000	147,535,000	50,783,000
....	12,300,000	1,939,000	103,528,000	1,001,000
l	299,169,000	67,143,000	513,718,000	101,984,000

* Including Pacific Islands.

In order to give a more definite idea of the development of the pa resources of New South Wales, the following table has been com showing at quinquennial periods from 1860 to 1890, and annually the stock that has been actually depastured in the colony. Fo sake of convenience, the numbers of cattle and horses are expres terms of sheep; that is, allowance has been made at the rate o sheep for each head of large stock, so that the total shows what w have been the result had the cattle and horses been replaced by equivalent of sheep. There is also shown the number of acres of in the colony to each sheep of the totals thus found, as well a number of such sheep per head of the population:—

Year.	Sheep.	Other stock expressed in terms of sheep.	Total.	Area per sheep.	She per he popula
	No.	No.	No.	acres.	N
1860	6,119,163	26,600,830	32,719,993	5·99	93
1865	8,132,511	22,444,920	30,577,431	6·40	74
1870	16,308,585	25,326,930	41,635,515	4·70	83
1875	25,353,924	34,917,820	60,271,744	3·35	101
1880	35,398,121	29,760,240	65,158,361	3·00	87
1885	37,820,906	16,620,120	54,441,026	3·60	57
1890	55,986,431	23,531,720	79,518,151	2·46	70
1891	61,831,416	25,061,320	86,892,736	2·25	74
1892	58,080,114	27,057,680	85,137,794	2·30	71
1893	56,980,688	27,630,830	84,611,518	2·32	69
1894	56,977,270	29,835,920	86,813,190	2·26	68
1895	47,617,687	26,380,000	73,997,687	2·65	57
1896	48,318,790	27,367,990	75,686,780	2·59	58
1897	43,952,897	25,831,300	69,784,197	2·81	52

The average area per sheep in 1897, namely, 2·81 acres, is than that for any year quoted in the table since 1885. The la years have been very unfortunate for New South Wales, the w rain and absence of feed in certain districts having been prejudicial to pastoral pursuits.

DISEASES IN STOCK.

On the whole, the stock of New South Wales was tolerably fre disease during 1897, especially as regards sheep and horses. S

p has been unknown in this colony for some considerable time, and
ed the whole of Australasia is at present exempt from this malady.
Western Australia, where it existed longest, no case has been met
since May, 1895. The importation of sheep from that colony into
South Wales is, however, still prohibited, and will remain so until
Western Australian Government declare the colony to be free from
. There are sixty-five sheep districts in New South Wales. In 1897
rot was noticed in five districts, but to a slight extent only;
in thirteen districts 44,300 sheep were affected with fluke. In
ve districts, to the extent of about 4½ per cent., the sheep were
rted to have been infested with worms in seven districts with
ach, lung, and tape worms; in five districts with stomach and tape
ns; and in two districts with stomach worms. Anthrax, although
e have been no serious outbreaks, appears to be increasing in several
icts, but the losses from this disease have been comparatively small.
dry season was distinctly unfavourable to the spread of such diseases
ot-rot and fluke.

he year was unusually free from epizootic diseases in horses. Anthrax
reported in one district; and Australian string-halt—a disease
idered by the Government Veterinary Surgeon to be due to the
ence of intestinal parasites—had appeared in seven districts. Prurigo
inued to give trouble in some districts. Influenza, commonly known
"pink-eye," was reported from two districts. Glanders has not
ared since it was discovered among circus-horses which had arrived
America in November, 1891, six of which had to be destroyed. A
iderable number of horses on the Lower Darling were attacked three
s ago with an affection of the eyes, which in many cases resulted
otal blindness; but in 1896 and 1897 no outbreak of this disease
irred, probably on account of the dryness of the seasons. This ail-
it is now believed to have been due to parasites. The number of
ses lost during the year through various causes, principally drought,
reported at 25,258.

Vith regard to cattle, pleuro-pneumonia was reported from twenty-
districts—on 78 runs—while in the other districts the cattle were
orted as free from that disease. Inoculation has been resorted to,
attended with good results, as is evident from the fact that in
previous year the disease was reported from 162 runs, in twenty-
it districts. Cumberland disease is reported to have killed 867
d, in ten districts, during the year. Symptomatic anthrax, or "black-
" carried off 315 head, in seven districts. Cattle to the number of
)6, in forty districts, are reported to have died from cancer and
nomycosis; and from twelve districts are reported outbreaks of
thalmia resulting in 697 deaths. Eighteen deaths from red water
reported in one district. Cattle to the number of 5,789, in forty-
districts, died from tuberculosis or had to be destroyed; and 1,140
hs from eating supposed poisonous plants were reported from nine
ricts.

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[illegible] the animal. Special attention is directed [illegible] and to meat and milk. Meat [illegible] destroyed, or so disposed of as to prevent [illegible] and the owner, or the person in whose [illegible] exposed for sale, is liable to a penalty of [illegible] meat condemned. In addition to the [illegible] officers—veterinary surgeons [illegible] Board of Health, whose duty it is not only [illegible]. In the metropolitan dis[illegible] authorities, and similar a[illegible]

[illegible] Royal Commission app[illegible] mitted to Parliament in A[illegible] opinion as to the efficacy [illegible] facility of applying it to an[illegible] as at market or when pu[illegible] applied to animals where they ar[illegible] and at a normal temperat[illegible] Although the experience is [illegible] tuberculosis in Ireland [illegible] and the Board of Healt[illegible] the case in this [illegible] communicated to pigs through [illegible] spread it rapidly. In a[illegible] uniform and effective, th[illegible] amongst [illegible] wing results:—Ox[illegible] 43·51 per cent.; [illegible] 0·02 per cent.; [illegible] the disease mig[illegible] in breeding [illegible] hereditary [illegible] Bang in Denm[illegible] agent by which [illegible] is not regarded [illegible]

[illegible] express the opinion th[illegible] and in anima[illegible] view was ta[illegible] but this vi[illegible] by the Com[illegible] attention is [illegible] was founded was [illegible] carried [illegible] primarily aris[illegible] in milk. [illegible] to an ext[illegible] it has been proved over and over again that tuberculous rendered perfectly harmless by boiling it for one minute. the limited extent of condemnation of tuberculous animals where inspection is both effective and uniform, the case of noted. There the meat inspectors are all veterinary surgeons. was discovered in 22,758 carcases, or 27·48 per cent. of the r slaughtered. Of these, 21,062 carcases, or 92½ per cent., as fit for food; 1,256 carcases, or about 5½ per cent., were inferior meat, not unfit for food, but to be disposed of in a at a fixed cheap rate; and only 440 carcases, or 2 per cent. number pronounced tuberculous, were condemned as unfit destroyed.

differ widely on the question of compensation. The arguavour of granting compensation are based on the difficulty, the impossibility, of ascertaining before slaughter whether is diseased; on the ground that the seizure is made in the public health; and in consideration of the great loss to The Royal Commission report against the granting of ion, though it should be stated that three out of the seven ners record their dissent from this conclusion. It is con- the majority that the risk involved in the purchase of r slaughter is fully recognised in the trade, and it was in evidence that this could not fail to affect the price. No advanced why, in the event of escaping loss, the buyer the whole benefit, and demand compensation if unfortunate. system of insurance was established in some quarters, and, cost was not more than a few pence to one shilling per ntered, it was found that the risk involved was not considered this trifling expenditure. The Commission recommend the insurance as the best way of meeting the loss.

h the inquiry showed that in the United Kingdom tuber- most prevalent among housed or yarded cattle, it must not be at the country herds are exempt from the disease. As the bacteriological examination of milk, the Liverpool Medical nd that out of 144 town samples only 4, or 2·8 per cent., minated, while 4 out of 24 country samples, or 16·6 per cent., nce of disease. Precautionary measures should be regarded orary expedient, and steps should be taken to eliminate To stamp it out by slaughter is considered impracticable, cost were not found to be intolerable. This course was elgium and failed. It is considered that the only effectual the system which has been so successful in Denmark, viz., tuberculin as a means of diagnosis, and the isolation of the is system can be absolutely relied on in 90 per cent. at least als treated. The majority of cases reveal the disease only in rm. By isolating the re-acting subjects, feeding calves from on boiled milk, and re-submitting the healthy stock once or twice a year to fresh tests, Professor Bang asserts that in a few ye healthy herd may be established. In support of this statement th lowing record of tests made by the Professor himself at Thureby a large dairy farm on the property of Count Moltke, will be read interest :—

Date of Test.	Re-acting Section.	Sound Section.	Number re-acting in Sound Section.
April, 1892	131	77	......
October, 1892	.....	77	7
May, 1893	90	103	10
October, 1893.........	......	107	1
April, 1894.........	81	122	2
October, 1894.............	.. ...	119	1 (?)
May, 1895	69	136	2 (+ 1 ?)
October, 1895......	......	132	2
April, 1896...............	54	149	7
October, 1896.................	48	147	7 (+ 2 ?)
May, 1897	49	155	6

Of the six animals re-acting in May, 1897, three were slaughte fortnight later, when only a very slight trace of the disease was fo

Another table, giving the results for the whole of Denmark, s that out of 5,306 herds tested, comprising 144,800 head of c 45,899 beasts re-acted, or 31·7 per cent. Under 6 months of ag number re-acting was 11·9 per cent: about 1 year old, 23·4 per c and about 2 years, 33·6 per cent. The percentage of cattle over 2½ re-acting was 41·6.

As in the case of inoculation against tick-fever, there is conside opposition in New South Wales to the general application o tuberculin test, the chief objection raised being the possibility o serum injected actually engendering the disease, or introducing complications the ultimate effects of which may not be foreseen. that there is wisdom in a restrained course of action is apparent in of the history of Dr. Koch's consumption cure, which was advanced years ago with a degree of assurance which later developments, as de strated by Professor Virchow, have conclusively proved was not just But the tests at Thurebylille, covering as they do a period of ove years, seem opposed to the supposition that the inoculation for diag purposes may engender the disease. The necessity for serum absol pure, and inoculation only by persons properly qualified, cannot, ever, be too strongly urged.

Tick Fever.

ie dreaded tick which has infested the cattle herds of a considerable on of the northern districts of Queensland, South Australia, and t Australia, has not yet made its appearance in New South Wales, the Stock Department is making every effort to prevent its intro- ion into the colony. How best to deal with the evil, should it its appearance, is a question which is causing much discussion, and Royal Commission on Tuberculosis, which has just been appointed, also deal with this matter. The practice of inoculating immune e with "recovered" blood is advocated by many, and some time ago Bacteriologist to the Board of Health made certain experiments, as ult of which he came to the conclusion that, first, inoculation is cious as a preventive of tick-fever; secondly, it may be attended by -results which, though milder, are similar to those following natural fever, and the significance of which it is not easy to estimate, but ig the period of the effects the meat of cattle slaughtered will be ior: and, thirdly, the quality and quantity of milk will not be ted. The balance of weight he considered is in favour of inoculation, h he regards, in spite of drawbacks, as a perfectly justifiable pro- re in view of the possible appearance of the tick in New South es. At present, however, opinion seems to be divided as to the sability of taking this course, the objection being taken that in view ie present imperfect knowledge of the disease the introduction of organisms is a dangerous experiment.

Noxious Animals.

ie only large carnivorous animal in Australia at all dangerous to stock e dingo, or native dog; but animals which consume the pasturage, as kangaroos, wallabies, hares, and rabbits, are deemed by the ers equally noxious. The rabbits are the greatest pest: at one d over 100,000,000 acres were infested with them, and 25,280,000 destroyed in one year, and their skins paid for by the Govern- t.

abbits first found their way into this colony from Victoria, where were liberated upwards of thirty years ago in the Geelong ict. Their presence first attracted serious attention in 1881, when, he Address-in-Reply to the Governor's speech at the opening of iament, regret was expressed that the Ministerial programme did include a Bill to deal with them. Although this suggestion was uled at the time it was made, complaints began to be heard in the h-western corner of the colony of the damage being done by the its, which multiplied so rapidly that in 1882 they were to be met on most of the holdings having frontages to the Murray. Attempts e to cope with them under the Pastures and Stock Protection Act ineffectual, and on the 1st May, 1883, a Bill having for its object their destruction became law. This Act (46 Vic. No. 1 known as the "Rabbit Nuisance Act," provided for the compul destruction of rabbits by the occupants of the land, who were to rec a subsidy from a fund raised by an annual tax upon stockowners. T fund soon proved inadequate, and from the 1st May, 1883, to 30th June, 1890, when the Act was repealed, it was supplemented £503,786 from the Consolidated Revenue. The following table sh the amount of assessment for each year during which the Act was operation:—

Year.	Amount of Tax.	Year.	Amount of Tax.
	£		£
1883 (from 1st May)	490	1888	157,252
1884	84,830	1889	98,312
1885	159,554	1890 (to 30th June)	4,714
1886	115,711		
1887	210,594	Total ......£	831,457

In addition to this amount of £831,457 and to the Government tribution of £503,786, landowners and occupiers are estimated to contributed £207,864, so that the total cost during the above-ment period exceeded £1,543,000.

The Rabbit Act of 1890 (54 Vic., No. 29) repealed the 1883 Ac those provisions of the Pastures and Stock Protection Act (44 Vic 11) relating to rabbits. It also provided for the proclamation from to time of Land Districts as "infected," and for the encouragem the erection of rabbit proof fences. From the 1st July, 1890, to the December, 1897, the State expenditure on account of rabbits only £38,679, the greatest part of which—£28,806—has devoted to the erection of rabbit-proof netting. In August, the Government offered a reward of £25,000 to any person who make known a process for the effectual extermination of the pest the offer was subsequently withdrawn. Conferences of landowner pastoralists on the subject of rabbit destruction were held in Oct 1885; June, 1886; and April, 1895. A new Rabbit Act was pre under the direction of the Minister for Lands in 1897, and will pro be submitted to Parliament at an early date.

A wire-netting fence, 346 miles in length, following the bou between New South Wales and South Australia, from the M

, has been erected by the New South Wales Government, the repair being shared by the Government and the owners of s adjoining the fence. A rabbit-proof fence has been erected ic expense between Barringun on the Queensland border and Darling at Bourke, a distance of 84 miles, the cost of its e being borne by the owners of the holdings adjoining it.

to this, the whole of the fence along the western side of the e from Bourke, *via* Blayney and Murrumburrah, to Corowa eme south of the colony, a distance of 612 miles, has been abbit-proof, the Railway Commissioners undertaking the pervision. Another rabbit-proof fence has been erected at xpense of the Governments of Queensland and New South n Mungindi to the Namoi River, a distance of about 115 cost of about £55 per mile, the netting used being 16 gauge, sh, and 42 inches wide—thus making the total length of ructed barrier-fencing 1,157 miles. It is estimated that about 18,000 miles of wire-netting fence have already been d it is known that many hundreds of miles are now in rection. The same kind of netting has not been used on fencing. On the line from Corowa to Narromine the netting e, 1½ inch mesh, and 42 inches in width. The contract price ting was £31 per mile, and the cost of the fence about £50 n the South Australian border, netting of 17 gauge, 1¼ inch 42 inches in width, was used, of a contract price of £37 netting, and a total cost of £76 per mile of fence. The d on the line from Narromine to Bourke is 16 gauge, 1½ inch 48 inches wide. The contract price for this netting was per mile, and the cost of the fence about £84 per mile. On erected on the Queensland border, netting of 16 gauge, 1½ and 48 inches in width has been used.

ident that the rabbit has become a far greater pest to the s than any of the indigenous animals of the country; but the as lately been asked whether, after all, there is not money bbits. During the last three years there has been an export kins to the annual value of over £13,000, and in this direc- seems to be no reason why a large trade should not be

A trade has also been begun in frozen rabbits and hares, t of which was commenced in 1895. Up to the present the has not reached large proportions; but the trade is being ally taken in hand. It is probable that there will always be mand for rabbits and hares in the United Kingdom. For one y stand freezing better than mutton and beef, which deteriorate tent by the process; like veal and lamb, however, rabbits and improved by freezing. The total importation of frozen rabbits t Britain in 1897 was 13,823 tons, valued at £543,491, no less 96 tons, equal to about 390,000 sheep, being imported from and New Zealand. Indeed, the disposal of the early stocks

of rabbits in the autumn had a somewhat adverse effect on
frozen mutton for a few weeks, and there was in consequence
demand for Australian and Argentine mutton.

The following table shows the importation of frozen ra
United Kingdom, according to the British trade returns, f
since 1893 :—

Year.	From Victoria.	From New South Wales.	From New Zealand.	From South Australia.	From Queensla
	cwt.	cwt.	cwt.	cwt.	cwt.
1893	....	....	70	....	....
1894	506	103	640	....	....
1895	9,820	945	2,870	....	....
1896	37,807	4,462	11,466	....	....
1897	75,057	21,354	68,906	1,723	8

The Pastures and Stock Protection Act (44 Vic. No.
Amending Act (45 Vic. No. 23) provide for the appointm
sheep district of eight directors, of whom five are the shee
the district and three are owners of large stock, elected
owners of not less than ten head. Those whose stock do n
in number are entitled to one vote; those who have from
to two votes; from 2,000 to 5,000, three votes; and owne
of 5,000, four votes. Power is given to these directors to t
to ensure the destruction within their districts of all nox
and to pay as rewards for such destruction, by way of bon
as may be fixed by the Board from time to time. The
sheep act in their respective districts as inspectors under t
carry into effect the various provisions of the Act, assessme
not exceeding in the annual aggregate 3d. per head of la
½d. per head of sheep. Owners of less than 100 sheep
large stock are exempted. The amount of assessment col
1897 was £35,235.

For the destruction of noxious animals other than rabbit
paid by stockowners in 1897 was £40,340. The number
destroyed during the year was 27,422; of wallabies, 1,118,4
rats, 23,822; wombats, 318; bandicoots, 800; pademelo
wild pigs, 9,524; hares, 599,595; native dogs, 13,264; opo
eagle-hawks, 6,502; crows, 52,682; emus, 1,575; and fox
loss of stock from native dogs is reported to have been 1
valued at £39,164; while the loss from tame dogs is retur
sheep, valued at £18,503.

The reward paid for scalps of noxious animals differs gre
to the locality, and is determined by the various Boards. T
during 1897 were as follow:—For kangaroos, from 1½d. to

ıbies, from 1d. to 3d.; pademelons, from 1d. to 3d.; hares, from .; kangaroo rats, from ½d. to 3d.; bandicoots, from ½d. to 3d.; gs, from 5s. to 40s.; pups, from 2s. 6d. to 15s.; opossums, ½d.; , from 3d. to 6d.; eagle-hawks, from 2d. to 2s. 6d.; emus, 6d.; om ½d. to 6d.; foxes, from 5s. to 30s.; and flying-foxes, 1d.

DAIRY FARMING.

irying industry of New South Wales has made considerable luring the last few years. As a profitable enterprise it was pursued mainly in the south coast district; but it is in the coastal regions, notably on the Clarence, Richmond, and Tweed nd to a less extent on the Macleay, Manning, Bellinger, and , that the greatest expansion is taking place, the inducements the north having led to the migration of many settlers from the districts. Contrasting the progress of the two districts, it may that in the counties of the north coast the number of dairy eased from 46,031 in the year 1895 to 81,836 in 1897, while unties of the south coast the numbers stood at 106,739 in 1895 147 in 1897—that is to say, the increase during the three years 1 to 78 per cent. in the north coast, and only about 8 per cent. uth. The production of butter in the north coast district was 3 lb. in 1897 as compared with 3,550,634 lb. in 1895, or an in- f about 82 per cent.; while in the south coast district the made was 8,360,309 lb. in 1895, and 9,350,527 lb. in 1897, or an of about 12 per cent. Cheese-making is still confined to the ast, and it is not probable that it will engage serious atten- e north; indeed, the small quantity formerly made there seems lining in favour of butter, which is a more profitable product. re is a great future for the dairy industry in the northern dis- apparent from the advances made during the last few years, ay be said that in a district most suitable for dairying, only kirts have so far been touched. The effect of the rapid develop- the industry is evidenced by the new life which has been infused towns of Lismore, Casino, Coraki, and Maclean, and the city on. But while dairying must be mainly confined to the coastal the industry will always be actively pursued in the more d parts of the non-coastal regions for the purpose of supplying nts, and already in places remote from the metropolis well- d factories have been established. At Forbes, Dubbo, and other towns, considerable capital has been expended in plant for re- ing, cooling-rooms, and pasteurization, and good butter is supplied hottest season. That dairying is possible only in heavily-grassed , with a good rainfall, is an erroneous idea; in lightly-grassed a good cow simply requires a larger grazing area.

of the native grasses of the colony are particularly suitable for ttle, as they possess milk-producing as well as fattening qualities.

The mildness of the winter season enables dairymen to avoid the h
expense of stall feeding, and although a certain amount of winter fod
is grown, it is given to the cattle in the fields. The crops most pop
for this purpose are maize, barley, oats, rye, lucerne, and the be
variety of sorghum or planter's friend. Ensilage, although very g
for dairy cows, is not used so generally as it should be, the latest ret
showing that there were only 26 pit and 228 stack silos in the col
making altogether 3,959 tons of ensilage. The area of land devote
green food and permanent artificially-sown grasses has been largely
tended during the last few years, and in March, 1898, it amounte
about 438,200 acres. The produce of this land is devoted to the
pasturing of dairy cattle, and as the area is still below the pre
requirements, an extension of this form of cultivation may be an
pated. The number of dairy cows in the colony is 411,498, distrib
as follows:—

	Number.
Northern Division—	
Coast	81,836
Table-land	25,651
Western Slope	10,804
Total, Northern Division	118,291
Central Division—	
Hunter and Hawkesbury Valleys	37,426
County of Cumberland and Metropolis	22,196
Table-land	32,211
Western Slope	4,433
Total, Central Division	96,266
Southern Division—	
Coast	115,447
Table-land	60,053
Western Slope	12,952
Total, Southern Division	188,452
Western Plains	8,489
Total, New South Wales	411,498

Constant attention to the peculiarities of the climate and the
of the colonists, as well as the judicious crossing of strains, has dev
a breed of cows peculiar to Australia, especially in the coast di
immediately south of Sydney; but all well-known breeds of milke
found in New South Wales. The milk yielded by the dairy cows
colony may be set down at about 115,216,000 gallons, of whic
quantity consumed in making butter and cheese during the pas
was about 84,815,000 gallons. The weight of the butter mad
29,409,966 lb., and of cheese, 3,937,168 lb. The yield of milk p
is a very variable quantity; in some of the principal dairy cen

as 500 gallons is returned as the yearly average, while in other
ts the yield falls far short of this. For the whole colony the
e may be set down at a gallon per day for every cow milked,
e cows are only milking for about nine months of the year, so
ch yields approximately 280 gallons.

introduction of the factory system in convenient centres, the
mprovements effected in dairy appliances, and the establishment
ct railway communication with Sydney, have done much towards
ping the industry. Dairy farming is not now, as formerly,
confined to farmers, as many graziers in a large way of business,
lly in the coastal districts, have lately turned their attention
industry, and are likely to find it profitable. When the factory
was first introduced the factories were mostly co-operative, and
cess of cream separation and butter making were carried on
er. This arrangement is gradually dying out, and central butter
es, fed by numerous separating places called "creameries," are
the place of the others. The advantages to be gained from the
are considerable—a butter of more uniform quality is made in
entre, and there is a reduction in the cost of manufacture, owing
greater quantity made and the improved appliances, such as re-
tors, which the larger establishments can profitably provide.

quantity of milk required to make a given weight of butter varies
erably according to whether the milk is treated by a separator or
old fashion. For butter which is termed factory or separator-
the average quantity of milk used per lb. of butter produced is
llons, or 26 lb. 2 oz. For ordinary hand-made butter the quantity
ed is about 3 gallons, so that there is a saving of about 13 per cent.
former method, in addition to the extra value of the butter pro-
the price in the Sydney markets during 1897 being from 1d. to
r lb. higher for the factory-made than the other kind. The
ty of butter made during each of the last ten years is set down
:—

Year.	Butter.		
	Factory.	Farm.	Total.
	lb.	lb.	lb.
1888	......	......	15,550,440
1889	......	......	17,600,264
1890	8,049,656	10,484,474	18,534,130
1891	7,661,197	10,701,700	18,362,897
1892	10,141,066	11,257,234	21,398,300
1893	15,635,360	10,755,484	26,390,844
1894	17,567,646	9,792,049	27,359,695
1895	16,770,189	6,525,323	23,295,512
1896	18,828,293	7,045,984	25,874,277
1897	23,713,509	5,696,457	29,409,966

The number of hands employed at dairy farming in 1897 was 25,4 of these, 12,940 were males, and 12,503 females. Included in the t are 536 persons employed in certain farm-factories, and omi from the returns of manufactories and works. The principal fact are situated in the Shoalhaven, Camden, Kiama, Eden, and Richm River districts. The produce of the factories in 1897 was 23,713,50 of butter, and 1,715,791 lb. of cheese. The following table shows t manufacture of butter in districts in 1897 :—

District.	Butter.
Northern Division :—	lb.
Coast	6,463,283
Table-land	579,356
Western Slope	64,430
Total, Northern Division	7,107,069
Central Division :—	
Hunter and Hawkesbury Valleys	3,330,159
County of Cumberland and Metropolis	5,658,354
Table-land	1,343,765
Western Slope	35,414
Total, Central Division	10,367,692
Southern Division :—	
Coast	9,350,527
Table-land	2,236,189
Western Slope	328,397
Total, Southern Division	11,915,113
Western Plains	20,092
Total, New South Wales	29,409,966

r to 1890 the colony was under the necessity of importing a
rable quantity of butter to meet local requirements, but from
ear an export trade was commenced, the surplus increasing
81,341 lb. in 1890 and 838,296 lb. in the following year to
,000,000 lb. in 1892, nearly 3,000,000 lb. in 1893, and over
00 lb. in 1894. But the unusual severity of the season
t down the production in 1895 to slightly below local require-
The following year was not too favourable to the dairying
y, but an improvement in production took place resulting in a
of 592,962 lb., while the net exports for the year 1897 reached
¾ million lb. The following table shows the production, the
ports or exports, and the total consumption of butter in New
Wales for each of the last ten years. It is noticeable that in
urse of the period the consumption of butter has increased by
han 50 per cent., while the increase in population has been only
cent. :—

Year.	Production of Butter.	Net Imports.	Net Exports.	Consumption of Butter.
	lb.	lb.	lb.	lb.
1888	15,550,440	1,493,744	....	17,044,184
1889	17,600,264	1,242,248	....	18,842,512
1890	18,534,130	... .	281,341	18,252,789
1891	18,362,897	....	838,296	17,524,601
1892	21,398,300	....	1,027,809	20,370,491
1893	26,390,844	....	2,705,369	23,685,475
1894	27,359,695	....	4,177,690	23,182,005
1895	23,295,512	51,611	....	23,347,123
1896	25,874,277	... .	592,962	25,281,315
1897	29,409,966	....	3,771,474	25,638,492

remarkable increase in the export trade, when the adverse seasons
nembered, is a satisfactory indication that the dairymen of the
have begun to realise the enormous market for their produce
is presented by the teeming populations of the United Kingdom.
nly during the last six years that Australian butter has seriously

influenced the London market, for although for some time sm
ments had been sent to London, the huge import into the
Denmark and Sweden practically controlled the price of the A
article. The position is now, however, changed, about two-thi
the butter imported into London during the winter months b
Australian origin, and on many occasions Australian creamery
has commanded a higher value than Danish. The prices obt
during the last two years for Australian butter in the London
were very satisfactory, especially in comparison with the phenom
low prices ruling during 1895. Great progress has been made of
years in the preparation of a good article for export, and many
refrigerating plants have been erected for that purpose in the
suitable localities. The prices per cwt. for New South Wales bu
London during the last five years were as shown below :—

Month.	1893.		1894.		1895.		1896.		1
	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highes
	s.	s.	s.	s.	s.	s.	s.	s.	s.
January ...	106	94	108	98	96	75	*	*	10
February ..	98	82	98	86	94	72	*	*	10
March	94	80	96	84	88	68	*	*	9
April.......	*	*	*	*	80	60	*	*	9
May	*	*	*	*	78	60	*	*	*
June....... .	*	*	*	*	77	54	*	*	*
July	*	*	*	*	64	56	*	*	*
August	*	*	*	*	58	56	*	*	*
September.	*	*	*	*	*	*	*	*	10
October	114	102	106	94	*	*	106	100	10
November ..	108	96	108	98	*	*	102	98	10
December..	110	98	116	104	*	*	100	94	10

* No quotations.

The experience of the trade so far has shown that butter sh
made expressly for export, and of the best possible quality and
salted and coloured to suit the taste of the particular market fo

tended. Were greater uniformity in the characteristics of the e secured, London purchasers would be enabled to "buy to arrive," would place New South Wales butter on a much better footing market. These results can only be attained by paying the greatest ion to cleanliness in all the processes of manufacture, taking n the reduction of the temperature of the cream before it is sent l or road to the factory, and making a more judicious selection of The most suitable form of box, the method of packing, and the y of the parchment paper used, are all matters of importance if ade is to succeed, and must receive the attention of the classes ted, as must also the question of winter feeding, so as to secure a ous supply all the year round. Buyers naturally give preference ces from which they can receive a constant supply, and periodic nts have practically each year to oust afresh competing butters they can gain a footing. Another matter requiring consideration advisability of direct shipments from the factories to specially ted agents in London or other centres. A serious fault, too, in a eal of the butter hitherto shipped, has been the presence of too foreign moisture, which, freezing more readily than the fatty nces of the butter, spoils the texture, and causes the article to crumbly. Satisfactory advances in these respects have been n the course of the last two years, but there is still room for ement.

awback to the trade is the difficulty in securing ocean freights the export season. The mail steamers do not provide accomon for butter after the middle of February, when the Tasmanian ason begins, consequently the produce is shipped by slower and ular vessels, and until provision is made by the mail steamers for de the industry will suffer. In this respect, the colony of a does not share the same disadvantages; because, whereas w South Wales the production of butter reaches its height in ry and March, by that time it has fallen in Victoria to somenear local requirements. Her heaviest output is in the spring, New South Wales in the late summer; Victoria thus gets her supplies on an earlier and better market. Added to this, the s of New South Wales do not traverse the dairying districts as lines of Victoria, and the climatic disabilities of the mother are greater.

ne time, Holland, Ireland, France, and Jersey, were the main of British supply, and even now these countries contribute to the imports into England and Scotland. When the market pendent on these countries butter in England ranged from 1s. 6d. d. and 2s. per lb. Then Denmark appeared in the market, and navia followed; next Canada, the United States, Australia, ine, and recently Finland and Russia. During the last ten he imports of butter into Great Britain have doubled, and at sent time the importations are valued at, roughly, £16,000,000.

The local butter market was marked by no exceptional features dur the year 1897. The average prices ruling in Sydney were:—

Month.	Price, per lb.	Month.	Price, per lb.
	s. d.		s. d.
January	0 8	July	1 2¾
February..............	0 7½	August	1 0¾
March	0 7½	September	0 11
April	0 10	October................	0 9
May	1 1½	November	0 8¾
June	1 4¼	December...........	0 8¼

The manufacture of cheese hitherto has not been so successfu that of butter, although it has been abundantly proved that • sufficient care is exercised in making and shipping, New South W cheese can find a ready sale in London at remunerative prices. quantity manufactured since 1888 is given below:—

Year.	Cheese.		
	Factory.	Farm.	Total.
	lb.	lb.	lb.
1888	....	....	5,687,702
1889	....	....	4,834,286
1890	3,592,717	1,203,850	4,796,567
1891	3,722,264	1,783,807	5,506,071
1892	1,803,674	3,214,622	5,018,296
1893	1,614,383	3,078,721	4,693,104
1894	1,656,703	3,163,709	4,820,412
1895	1,670,255	1,268,530	2,938,785
1896	1,887,106	2,132,738	4,019,844
1897	2,221,377	1,715,791	3,937,168

The price of cheese in the Sydney market during 1897 wa follows:—

Month.	Large, per lb.	Loaf, per lb.	Month.	Large, per lb.	L p
	d.	d.		d.	(
January	3¼	3½	July....................	4¾	.
February	2¾	3¼	August	4¼	
March....................	2¾	3¼	September	4½	.
April	3¼	3¾	October	5	.
May..............	4¾	...	November	4¾	.
June	4½	...	December	4¾	.

he following table shows the manufacture of cheese in districts :—

District.	Cheese.
	lb.
Northern Division :—	
Coast	40,088
Table-land	65,585
Western Slope	502
Total, Northern Division	106,175
Central Division :—	
Hunter and Hawkesbury Valleys	21,484
County of Cumberland and Metropolis	11,428
Table-land	96,624
Western Slope	120
Total, Central Division	129,656
Southern Division :—	
Coast	3,619,205
Table-land	79,553
Western Slope	2,535
Total, Southern Division	3,701,293
Western Plains	44
Total, New South Wales	3,937,168

It is not probable that the manufacture of cheese will command the me attention in this country which has latterly marked the butter dustry. During three years of the last decennial period, the colony ported a small quantity of cheese, viz., 76,000 lb. in 1890, 32,000 lb. 1893, and 162,000 lb. in 1894; but taking the period as a whole, the erage annual production has been 4,625,000 lb., and the average nual consumption 4,843,000 lb., leaving, therefore, a deficiency to imported of 218,000 lb. Evidently, it has paid better to make butter an cheese. As a matter of fact, in comparison with Canada and urope, New South Wales is decidedly at a disadvantage in regard to eight, distance from the market, and climatic suitability. Cheese atures quickly and, unlike butter, cannot be frozen ; and it decreases in lue unless sold just at the right time. These drawbacks do not apply much in the case of Canada, where shippers are near enough to the arket to be able to regulate the supplies. And when it is remembered hat 1 lb. of butter has the same money value as 2½ lb. of cheese, while he cost of freight is equal, it is not surprising that even where cheese an be produced in New South Wales under excellent conditions, its anufacture is not being extended.

The following table shows, for each year of the last decennial peri the local production, the net import or export, and the total co sumption of cheese :—

Year.	Production of Cheese.	Net Import.	Net Export.	Consumption of Cheese.
	lb.	lb.	lb.	lb.
1888	5,687,702	390,773	....	6,078,475
1889	4,834,286	654,744	....	5,489,030
1890	4,796,567	....	76,101	4,720,466
1891	5,506,071	150,463	....	5,656,534
1892	5,018,296	53,700	....	5,071.996
1893	4,693,104	....	31,979	4,661,125
1894	4,820.412	....	162,442	4,657,970
1895	2,938,785	64,790	....	3,003,575
1896	4,019.844	949,706	....	4,969,550
1897	3,937,168	187,339	....	4,124.507

It is probable that other milk products will shortly receive attenti at the hands of farmers. Already some attention has been given the manufacture of condensed milk, while a similar product, known "concentrated milk," is also being turned out from Coolangatta, on t Hay Estate. This will keep for months in cool chambers, and is larg used on the Peninsular and Oriental Company's steamers. Bei without sugar, it has all the richness and flavour of fresh milk, and this respect is more useful than condensed milk, which is not palatal to many people. For the last three years a small quantity has be exported, principally to Western Australia and Queensland. Duri 1897 condensed milk also was sent to Western Australia. To wh extent business might be done within the colony is apparent from the f that the net imports of condensed milk average annually 2,390,000 of the value of £52,000. And apart from the requirements of colony, there is no apparent reason why New South Wales conden milk should not compete with the Swiss product in the London mark The quantity of condensed milk imported into Great Britain in 1 was 756,243 cwt., representing a value of £1,398,363.

The value of the dairy industry to the colony, excluding that swine-breeding, is estimated at £1,960,000 for the year 1897. T value of milk not made into butter, but used for human consumpti was £901,000; of butter, £980,000; and of cheese, £66,000; while balance of the milk, used mostly in feeding pigs, was worth appro mately £13,000. The dairy cattle of the colony were valued £2,057,000.

SWINE.

The breeding of swine, which is usually carried on in conjunct with dairy-farming, has been very much neglected in New South Wa and in 1897 the number of stock was 100,467 less than in 18 ering the importance which the industry has attained in other ies, it is a matter of surprise that more attention has not been it in this colony, where the conditions of farming in many parts, especially in the coast districts, offer great facilities for the of this class of stock. The following table shows the number ne in New South Wales for 1860 and subsequent periods :—

Year.	Swine.	Year.	Swine.
1860	180,662	1887	264,111
1865	146,901	1888	248,583
1870	243,066	1889	238,585
1875	199,950	1890	283,061
1880	308,205	1891	253,189
1881	213,916	1892	249,522
1882	154,815	1893	240,860
1883	189,050	1894	273,359
1884	211,656	1895	223,597
1885	208,697	1896	214,581
1886	209,576	1897	207,738

e production of swine is a large factor in dairy-farming, but the ase in the number of stock has not kept pace with the increase in uantity of milk available for food. Although at the various farms, ries, and creameries many more pigs could be fattened, the large tity of bacon and hams imported annually shows that the local nd for swine of a good class or breed is far in advance of the supply. reeds generally met with in the colony are the improved Berkshire, ıd, China, Yorkshire, and Prince Albert, and probably the Tam- h and Sussex might be advantageously introduced. The crosses these breeds are numerous, but unfortunately in the majority of the animals have deteriorated very considerably from want of care selection in the breeding, and dairymen find it difficult to obtain a class of store pig. A farmer who sells his milk to a creamery can hase separated milk at from 2d. to 3d. for 10 gallons, a price which ers it a most profitable pig feed, provided that other crops, such as e, rye, peas, mangolds, or pumpkins, are grown to supplement the diet. At present there are few factories devoted entirely to the ng of bacon and hams, and the pigs are usually sold when fat as ers at from 60 lb. to 90 lb. weight, the majority being sent to the ney market alive. The price ruling for good porkers during 1897 ed from 18s. 6d. to 23s. 6d. Owing to neglect to grow root crops winter feed for pigs, when milk is scarce, the demand for store pigs he commencement of the summer is very great, while there is lly a corresponding glut of fat pigs at low prices as winter oaches.

he number of swine slaughtered during 1897 was 118,047, of which 568 were killed at the Metropolitan abattoirs; and the quantity of

bacon and hams made was 6,544,781 lb., chiefly in the South C
District. It is possible, however, that a large number of swine
slaughtered for bacon-curing, concerning which returns are not colle
The following is a statement of the quantity of bacon and ham ma
the various districts :—

District.	Bacon and Hams.
Northern Division—	lb.
Coast	921,888
Table-land	338,975
Western Slope	49,956
Total, Northern Division	1,310,819
Central Division—	
Hunter and Hawkesbury Valleys	148,609
County of Cumberland and Metropolis	2,607,954
Table-land	395,732
Western Slope	28,692
Total, Central Division	3,180,987
Southern Division—	
Coast	1,436,109
Table-land	435,872
Western Slope	168,940
Total, Southern Division	2,040,921
Western Plains	12,054
Total, New South Wales	6,544,781

The following table shows the production of bacon and hams, the imports, and the total consumption for each of the last ten years :—

Year.	Production of Bacon and Hams.	Net Import.	Total Consumption.
	lb.	lb.	lb.
1888	7,057,903	1,198,379	8,256,282
1889	6,331,709	1,360,479	7,692,188
1890	7,429,971	1,464,511	8,894,482
1891	6,009,600	1,143,922	7,153,522
1892	5,107,077	749,416	5,856,493
1893	7,760,388	452,768	8,213,156
1894	6,792,903	434,722	7,227,625
1895	5,250,717	417,388	5,668,105
1896	5,303,763	816,165	6,119,928
1897	6,544,781	578,877	7,123,658

e is no reason why the production of bacon and hams should very largely increased. More bacon factories are wanted rith refrigerating machinery, so that curing may be continued the summer months. In these central establishments, moreover, care could be exercised both in securing uniformity in the quality rticle and in cutting. This last is an important matter, as there uch as 1d. to 2d. per lb. difference between a well-cut and a ut ham. For export the animals should be grown larger, as bacon pigs run to 300 or 400 lb. weight each. The quantity n and hams cured since 1889 is shown below :—

Year ended 31st March.	Bacon and Hams.		
	Factory.	Farm.	Total.
	lb.	lb.	lb.
1889	....	....	7,057,903
1890	....	....	6,331,709
1891	2,541,948	4,888,023	7,429,971
1892	2,120,269	3,889,331	6,009,600
1893	1,803,824	3,330,253	5,107,077
1894	3,704,996	4,055,392	7,760,388
1895	2,417,373	4,375,530	6,792,903
1896	2,522,695	2,728,022	5,250,717
1897	2,902,987	2,400,776	5,303,763
1898	4,458,063	2,086,718	6,544,781

rould seem that coincident with the progress of the dairying y should be that of the trade in pigs. Take Denmark as an le. Fifteen years ago its export of pigs was not more than a few d per week; now it is 60,000. It is the largest exporter to Britain, and has taken away one-third of the Irish trade. But, have been seen from the previous tables, in New South Wales the four years 1894–97 the number of swine decreased from 0 to 208,000; the number annually slaughtered fell from 0 to 148,000, and the quantity of bacon and hams cured, from 00 lb. to 6,545,000 lb. Up to the year 1897, a fear of bringing the high prices offered for porkers by the metropolitan butchers to have checked any disposition to place a greater number on rket; but as dairying advances the farmers will realise that o must make the most of their by-products, and a large trade ne is inevitable. As a matter of fact, there was an increase of swine in 1898.

The number of swine in each of the Australasian colonies at the of 1897 was as follows:—

Colony.	Swine.
New South Wales	207,738
Victoria	337,588
Queensland	110,855
South Australia	48,664
Western Australia	31,809
Tasmania	43,520
New Zealand	186,027
Australasia	966,201

It will thus be seen that Victoria has a larger number than any colony, its total being 337,588, or 34·9 per cent. of the whole New South Wales ranks second with 207,738, or 21·5 per cent.; New Zealand third with 186,027, or 19·2 per cent.

SLAUGHTERING.

Slaughtering for food is permitted only in places licensed for the pose, but such establishments are very numerous. In the metropol district there are 70, and in the country districts 1,799 slaughter-y employing respectively 376 and 5,187 men; in all, 1,869 establishm and 5,563 men.

The consumption of meat cannot be given accurately for the m politan and country districts separately, as several of the largest co slaughter-yards are carried on for the purpose of supplying the m politan market. For the colony generally it is estimated that average annual consumption of mutton per inhabitant is 111·6 l beef 157 lb., and of pork and bacon 12·9 lb., making a total consum of 281·5 lb.

The following table shows the quantity of stock of each kind during 1897:—

Stock.	Number slaughtered in 1897.		
	Metropolitan.	Country.	Total.
Sheep	1,250,774	4,420,071	5,670,845
Lambs	14,850	104,408	119,258
Bullocks	78,427	165,658	244,085
Cows	16,815	83,487	100,302
Calves	12,546	8,965	21,511
Swine	81,879	66,168	148,047

e figures represent the stock slaughtered for all purposes. Of the ınd lambs, 3,347,006, including 1,154,506 killed on stations and represent the local consumption; 750,282 sheep were required .t-preserving establishments; 1,065,990 for freezing for export; 626,825 were boiled down for tallow. All the cattle killed, 27,420 treated in the meat-preserving works and 7,132 exported were required for local consumption; and of the swine, 72,720 ıred as bacon, and 77,251 killed for ordinary consumption. The ng shows the slaughter of stock for ten years:—

Establishments.	Hands Employed.	Sheep.	Lambs.	Cattle.			Swine.
				Bullocks.	Cows.	Calves.	
1,410	3,443	1,671,039	76,916	164,977	60,570	18,339	198,627
1,409	3,713	1,802,782	68,977	160,545	69,650	33,969	167,004
1,485	3,642	2,014,055	71,887	190,690	62,870	22,498	173,354
1,617	4,154	2,404,953	127,709	210,731	66,391	25,813	178,355
1,870	4,860	3,371,451	84,728	188,518	123,058	27,022	184,065
2,105	5,786	7,883,650	150,458	230,388	78,061	23,907	188,985
2,146	5,718	8,098,408	154,470	238,349	83,974	23,979	190,277
1,864	6,297	8,256,079	106,924	276,998	87,481	23,618	178,588
1,905	5,959	6,077,420	119,329	232,875	98,910	19,461	149,971
1,869	5,563	5,670,845	119,258	244,085	100,302	21,511	148,047

value of stock slaughtered can be determined with exactness only e metropolitan market. Taking all stock sent to the Homebush rds, at Sydney, during 1897, for the purpose of slaughter, the price ep averaged 9s. to 13s. for wethers with wool, and 5s. to 7s. shorn; 9s. for ewes with wool, and 3s. to 6s. shorn. For bullocks the ge price was £4 10s. to £7 10s. per head; and for cows, £3 to £5. e Abattoirs during 1898 mutton sold at an average of 1½d. per lb.; ll skin was worth 4s. 6d., the shorn skin 10d. the fat 1¼d. per lb., ıe head ½d. each. Beef brought 1½d. per lb.; the head and feet worth 1s. 10d. per set; the fat, 1½d. per lb.; a bullock hide, 17s.; hide, 13s.; and offal, 3s. 6d. per head. Veal averaged 1¾d. per lb., in being worth 6s. Good lambs brought 4s. 6d. each, and pork or 4½d. per lb., good fat realising about 3d. per carcase.

SURPLUS STOCK.

he pasture resources of New South Wales expanded at a ratio at proaching that of the increase of live stock, the inability of the y to dispose of its surplus would not be a matter of material confor though all classes of sheep decrease in value after a certain age, alue of their wool, except in special and exceptional circumstances, re than equal to the value of the grass they would consume. It tunately happens, however, that under the present conditions of rage the number of sheep in the colony is, in a favourable season, reat to be properly maintained, so that the disposal of the surplus important question.

By "cast" is meant the number at such age when it wu
profitable to send them for slaughter than to keep them, in
ewes for breeding, or for further growth in the case of n
The cast, expressed as a percentage of the whole of the sheep
is a variable quantity, which, however, may be taken as ra
13 to 14½ per cent., so that for the year 1897 the cast
6,765,000, viz., about 3,084,000 ewes and 3,681,000 wether
this there was a local consumption of 3,347,000, and abou
additional were required for the markets of the neighbouri
This gives a total consumption of 4,369,000, leaving a
2,396,000.

There are already in the colony works for preserving m
output for the year 1897 amounted to a little over 750
while the frozen-meat trade required some 1,066,000 mor
1897, 627,000 sheep were boiled down for tallow, so tha
the whole of the surplus sheep of the colony were dispose
reason of the heavy losses through drought an inroad was m
flocks remaining to the extent of 47,000. As regards cattle,
cast for 1897 was about 267,000 head, while the consumptio
to 366,000, showing a deficiency of 99,000. From Queens
were imported during the year 147,000 head in excess of
For the past five years there has been a net import of c
extent of about 124,000 a year, so it may safely be assume
South Wales if left to her own resources would not be able
an export trade. It is well-known that there is a large
colony well adapted for carrying cattle, and if the ove
became profitable there is no doubt that much of the country
sheep are now grazed would be devoted to cattle, the nece
being obtained from Queensland.

The question of the live stock trade with Europe is so i
Australia that an account of the results attained so far w
some length in a previous edition of this book. The efforts
an export trade in live cattle with the United Kingdom
ever, been practically abandoned, the mortality being suffi
to discourage those under whose auspices the experimenta
were made. In 1894 there was an export of 108 live c
United Kingdom; in 1895, 1,857 head were shipped to
Kingdom, and 123 to France; but in 1896 and 1897
transacted. Most of the difficulties met with arose from
of the cattle, nearly all of which were drawn from the
long distances to the port of shipment without sufficient
unskilfully hoisted on board in a starved and fevered
signed to unsatisfactory quarters, and submitted to
and cultivated food for the first time. To make
season was unfortunately a dry one, and the drought
in prime beasts, so that altogether there was no ind
to touch the trade. The disadvantages under

ents laboured, are not, of course, of such a kind as to prove
mountable to a determination to breed with the special object of
ging the cattle to Europe; but there will always be keen com-
ion to face from countries very much nearer to the coveted markets
is Australia, and the risk of landing the cattle at a time when
s are below a payable figure. During the last few years the
ntine Republic has made great strides in the live cattle and sheep
, and is already one of Great Britain's chief sources of supply. The
ber of live sheep imported into Great Britain from that country
risen from 23,365 in 1893 to 345,217, of a value of £528,600, in
. During the same period the value of live cattle imported from
Argentine increased from £106,674 to £1,153,507.

THE FROZEN MEAT TRADE.

e table given below shows the growth of the export trade in New
h Wales meat from the introduction of the system of shipping
on in a frozen state in 1881. Beef, mutton, and pork are all
ded in the figures. The weight of the preserved meat exported
to 1887 cannot be given, as it was not recorded; and in ampli-
n of the figures for the last few years, it may be said that during
the shipments of frozen meat comprised 1,021,006 carcases of
on and 88,719 quarters of beef; during 1896, 1,372,373 carcases of
on and 16,286 quarters of beef; and during 1897, 1,065,990
es of mutton and 28,529 quarters of beef:—

Frozen.		Preserved.		Other.		Total Value.
Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
cwt.	£	lb.	£	lb.	£	£
9,980	8,554	....	* 176,721	1,152,348	15,321	200,596
13,782	22,910	....	* 143,601	622,263	9,087	175,598
34,911	43,100	....	* 221,912	734,274	9,870	274,882
13,309	12,321	....	* 161,477	621,007	8,948	182,746
6,271	6,064	....	* 166,561	458,886	6,682	179,307
4,852	4,671	....	* 77,756	263,637	3,112	85,539
21,831	19,310	9,761,154	150,714	919,750	24,752	194,776
52,262	44,537	4,528,269	69,481	809,507	16,028	130,046
37,868	33,426	2,877,303	52,321	743,685	12,984	98,731
72,304	71,534	4,655,523	74,329	638,137	13,477	159,340
105,013	101,828	6,581,713	87,632	443,902	9,596	199,056
223,074	169,425	8,620,747	105,922	786,057	8,342	283,689
220,584	141,640	13,092,942	164,592	632,767	9,081	315,313
339,404	193,760	16,382,577	206,054	934,083	22,289	422,103
608,441	560,823	22,384,285	302,828	1,191,850	21,647	885,298
642,566	343,680	16,351,936	218,292	1,288,946	37,961	599,933
304,372	275,647	10,903,611	147,165	2,256,916	65,942	488,754

* Including extract of meat.

A satisfactory solution of the question of disposing of the s stock by export to Europe is surrounded with great difficulty. not yet been ascertained whether a remunerative price for mutt be maintained in London, nor—what is often lost sight of—whetl colony, under the present conditions of stock-raising, is able to off the surplus stock it now produces; this last is very doubtful. of the essentials of a successful export trade is continuity of without which the business cannot thrive. On page 578 there i a statement of the estimated losses which the pastoralists have through drought during a period of twenty-three years. From appears that in only nine of those years has there been no loss thro seasons. In some of the other years the loss has been extreme recurrence of similar seasons would leave little of the cast avail export, even if it were possible to fatten the stock. These are which require consideration in connection with the export trad which so great hopes are entertained.

The quantity of fresh and frozen mutton imported into the Kingdom during 1897 was 357,647,000 lb.; besides this, there import of 612,000 sheep. These two classes of imports would b to about 8,063,000 carcases of Australian mutton, reckoning the carcase at 48 lb. The present New South Wales surplus, after de the local demand, and the requirements of the meat-preserving is, as shown on page 628, 1,646,000 sheep. The following tabl the consumption of fresh mutton in England; the figures repres number of animals, the weight of which cannot be given:—

Year.	Locally-raised Sheep available for Slaughter.	Live Imports.	Frozen Imports.	To Consum
1883	11,340,000	1,116,000	201,000	12,65
1884	11,750,000	945,000	632,000	13,32
1885	12,027,000	751,000	777,000	13,55
1886	11,582,000	1,039,000	1,187,000	13,80
1887	11,760,000	971,000	1,542,000	14,27
1888	11,575,000	956,000	1,975,000	14,50
1889	11,794,000	678,000	2,164,000	14,63
1890	12,667,000	358,000	2,948,000	15,97
1891	13,414,000	344,000	3,358,000	17,11
1892	13,457,000	79,000	3,310,000	16,84
1893	12,681,000	63,000	3,890,000	16,63
1894	11,987,000	485,000	4,324,000	16,79
1895	11,910,000	1,025,000	5,053,000	18,02
1896	12,342,000	770,000	5,718,000	18,83
1897	12,227,000	612,000	6,307,000	19,14

Below is given a statement of the average wholesale prices of in various years for English and frozen mutton sold in London. an examination of the figures, it would seem that the class re r-grown mutton in England is quite distinct from that using ı mutton :—

Best English.	New Zealand.	New South Wales.	River Plate.	Year.	Best English.	New Zealand.	New South Wales.	River Plate.
d.	d.	d.	d.		d.	d.	d.	d.
9	7	6¼	6	1891	7	4¼	3⅛	3⅛
7¾	6	5½	4¾	1892	7	4⅓	3⅓	3⅛
7⅛	5 5/16	4⅞	4⅞	1893	6⅛	4¼	3¼	3½
8	5⅛	4½	4¾	1894	7⅜	4⅛	2⅞	2⅞
6⅛	4⅛	4	3 7/10	1895	7½	3⅞	2⅞	2⅞
7½	4½	4 1/16	3 7/10	1896	6⅞	3⅝	2⅜	2⅜
8¼	5 1/16	4⅝	4⅛	1897	7⅛	3⅝	2½	2⅓
8	4⅝	3 11/16	3⅝					

Other Pastoral Products and By-products.

minor products arising from pastoral occupations include tallow, fat and lard, skins and hides, furs, horns, hoofs, bones, and hair, of these are more specially dealt with in the chapter on manuies and works, and need here only brief mention.

ing the first five years of the decennial period 1888-97, the total ity of tallow made was 88,075 tons, but the output of station and ıer boiling-down establishments during the five years ended 1897 sed to 210,750 tons. The production is liable to great fluctuation, ling, of course, on the seasons—in the years of drought the r of sheep disposed of in this way being very large. Of course, ame conditions existed in earlier years when the output was r; but now the arrangements for boiling-down and transit to t are much better than formerly, and tend to increase the ction of tallow. The average output for the last five years was) tons per annum, the average quantity exported being 31,900 and that locally consumed 10,250 tons. In 1893, the total ction was 42,050 tons; in 1894, 53,450 tons; in 1895, 53,850 while in 1896 it fell to 28,550 tons. The total output for 1897 2,850 tons, of which 24,250 tons was exported, and 8,600 tons locally. The value of the 1897 production was approximately ,025.

ring 1896 and 1897 a quantity of edible fat was exported to the ed Kingdom; but lately the industry has been abandoned. In the quantity sent away was 142,339 lb., of the value of £1,779; 97 the quantity exported was 480,002 lb., valued at £4,887. The tity and value of lard, the produce of the colony, exported during ast five years was—in 1893, 31,759 lb., valued at £569; in 1894, 12 lb., valued at £773; in 1895, 68,564 lb., valued at £1,078; in

1896, 40,723 lb., valued at £714; and in 1897, 66,400 lb., valued £1,029. During the first three years mentioned the exports of were in excess of the imports; but in 1896 and 1897 there was a import of 60,047 lb. and 189,741 lb. respectively.

The value of the net exports of skins and hides for the last ten was as follows:—In 1888, £178,536; in 1889, £250,702; in £191,218; in 1891, £388,395; in 1892, £509,933; in 1893, £638, in 1894, £398,029; in 1895, £643,989; in 1896, £313,199; and 1897, £450,865.

There is a small trade done in the export of furs, the produce of colony, the value in 1894 being £669; in 1895, £1,245; in £1,371; and in 1897, £2,947. But the import is larger, the val the net import of furs being in 1894, £2,923; in 1895, £2,99 1896, £2,990; and in 1897, £3,015. The imported furs are, of of the kind which could not be obtained locally.

The value of hoofs, horns, and bones, the produce of the co exported during the last four years was as follows:—In 1894, £17, in 1895, £20,103; in 1896, £20,595; and in 1897, £21,940.

The hair of animals is used largely for upholstering, and in plastering trade. The value of hair exported, the produce of colony, for the last five years was, in 1893, £4,133; in 1894, £2, in 1895, £4,630; in 1896, £8,339; and in 1897, £6,618. A con able quantity is used locally.

POPULATION.

E of the first results of the Census of 1891, taken on the 5th April, was the readjustment of the estimates of population. Prior t date there had been no actual count of the people of New South since 1881, but an approximate return was made up of the esti- population on the 31st December of each year. This was done by ; into account the increase caused by the excess of births over , and of arrivals over departures. It is evident that if these data be ascertained exactly, there would be no difficulty in making an te estimate of the population at any time. But although the nery for the registration of births and deaths ensures a fairly correct under these heads, it is not so easy to obtain exact particulars ting arrivals and departures—especially departures. The lists of gers arriving by sea are usually accurate; but in the case of persons g the colony, it is found that large numbers go on board steamers last moment, without having previously booked their names, and so t recorded amongst the emigrants. It therefore becomes necessary, estimating the population, to make allowance for unrecorded ures. The results of the Census of 1891, however, showed that owance made on this account during the previous ten years was fficient, and that the estimates were therefore in excess of the population. Consequently they were recast, and, as now pre- , the figures will be found to differ from those published prior 2.

following is an estimate of the population of each of the Austral- colonies on the 30th June, 1898:—

Colony.	Population.
New South Wales	1,335,800
Victoria	1,169,434
Queensland	493,704
South Australia*	361,483
Western Australia	170,971
Tasmania	172,981
New Zealand†	733,555
Australasia	4,437,928

* Including Northern Territory. † Exclusive of 39,854 Maoris.

11th July, 1888. By this measure vessels are prohibited from carrying to the colony more than one Chinese passenger to every 300 tons: and Chinese landing are required to pay a poll-tax of £100; they are not to engage in mining, without express authority under the hand and seal of the Minister of Mines; nor, as before explained, are they permitted to take advantage of the Naturalisation Act. Chinese who by birth are British subjects do not come within the provisions of this restrictive legislation; but they have to pass the educational test prescribed by the Immigration Restriction Act of 1898. The penalty for a breach of the Chinese Restriction Act is £500. The Act has greatly restricted Chinese immigration, but it is believed that a number of Chinese find their way into New South Wales by way of the other colonies. How far this has been the case will not be known until the Census is taken in 1901. According to the official returns of Chinese immigrants, there has been a great falling-off in the arrivals since 1888, as the following table will show:—

Year.	Chinese arriving.	Chinese paying Poll-tax.	Year.	Chinese arriving.	Chinese paying Poll-tax.
1885	2,929	1,060	1892	21	2
1886	3,092	1,284	1893	34	1
1887	4,436	1,798	1894	76	3
1888	1,848	462	1895	94	2
1889	7	1	1896	99	2
1890	15	3	1897	34	3
1891	17	1			

At the Census of 1891, there were 42,521 Chinese recorded in the Australasian colonies, as shown in the table given below. When the Census of 1881 was taken the total number in the colonies was set down as 43,706, so that there was a net decrease during the ten years of 1,185:—

Colony.	Number.
New South Wales	14,156
Victoria	9,377
Queensland	8,574
South Australia	3,997
Western Australia	917
Tasmania	1,056
New Zealand	4,444
Australasia	42,521

In the colony of New Zealand a Census is taken every five years. At the Census of 1896 the number of Chinese was 3,711.

id of 1897 it was estimated that the southern province had 12 inhabitants less than New South Wales. In the other three es of Tasmania, New Zealand, and South Australia, the annual se during the last ten years was at the rate of 2·36 per cent., 1·93 nt., and 1·65 per cent. respectively. The maximum rate in nia was 5·04 per cent. in 1891; in New Zealand, 3·36 per cent. in and in South Australia, 3·36 per cent. in 1892. In Tasmania inimum rate of increase was 0·34 per cent. in 1892, and in New id, 0·44 per cent. in 1888; while in South Australia an actual se at the rate of 0·51 per cent. was experienced in the year 1888. aximum rate of increase for the whole of Australasia was 3·01 nt. in 1890, and the minimum rate, 2 per cent. in 1896.

growth of population in the continent of Australia, and also in ole of Australasia, in periods from 1861 to the end of 1897, is in the following table:—

Year.	Continent of Australia.	Australasia.
1861	1,076,666	1,265,898
1866	1,345,058	1,646,540
1871	1,601,295	1,970,066
1876	1,855,996	2,360,555
1881	2,205,271	2,823,459
1886	2,670,878	3,391,214
1891	3,112,359	3,899,036
1892	3,181,696	3,985,273
1893	3,241,613	4,068,302
1894	3,310,182	4,153,766
1895	3,378,811	4,238,350
1896	3,442,929	4,323,204
1897	3,509,376	4,410,151

following table gives the net increase of male and female popu- in New South Wales during each year since 1888, allowance made for the persons whose departure from the colony was not lly recorded:—

Year.	Males.	Females.	Total.
1888	14,840	15,910	30,750
1889	15,820	14,920	30,740
1890	20,640	19,400	40,040
1891	21,220	22,220	43,440
1892	15,670	16,680	32,350
1893	12,450	13,270	25,720
1894	13,960	14,120	28,080
1895	12,210	14,210	26,420
1896	9,990	9,780	19,770
1897	14,210	11,610	25,820

Tested by the voluntary influx of population—and no test coul more practical—the attraction which New South Wales has offere the settler for many years is most marked. As long as the bal of attraction remained with the other colonies, so long did the tid immigration set to their shores; but for many years past New S Wales has offered a more substantial reward to the settler than an its neighbours—if Western Australia be excepted—and the resul seen in the increased numbers who have come hither. The table g below shows the total increase in population in each of the Austral colonies during the ten years between the Census of 1881 and th 1891, together with a distribution of this increase between the sources :—

Colony.	Total Increase.	Natural Increase.	Net Increase due to Immigration.
New South Wales	380,766	217,938	162,828
Victoria	278,059	161,698	116,361
Queensland	180,193	77,417	102,776
South Australia	58,009	86,287	(—) 28,278
Western Australia	23,398	9,292	14,106
Continent of Australia	920,425	552,632	367,793
Tasmania	30,962	25,001	5,961
New Zealand	134,621	127,184	7,437
Australasia	1,086,008	704,817	381,191

The sign ( ) indicates decrease.

This table shows that out of a total increase by immigrati 381,191 persons, the large proportion of 43 per cent. found a in New South Wales, as against 31 per cent. attracted to Victoria 27 per cent. to Queensland. In the total of 162,828 persons en to New South Wales are included 34,079 assisted immigrants. In the same period 103,140 assisted immigrants arrived in Queensl but as the net increase from immigration was only 102,776, it is ev that some of the people who were assisted to emigrate to that colon not remain there. Since 1860, the year following the separati Queensland, the arrivals in New South Wales have in every year. and 1896 alone excepted, exceeded the departures. The greatest app excess during any one year was in 1883, when the number of arr was greater than the departures by 27,278.

Assisted immigration dates from 1832. From that year unti practical cessation of the system in 1888, it was, with slight inte tions, the settled policy of New South Wales to grant assistan desirable persons who wished to make their home in the colony. the 1893 edition of this book will be found a statement showin e by assisted immigration up to that year. During 1894 the d immigrants arriving in the colony numbered 67, of whom 13 adult males, 28 adult females, 18 male children, and 8 female en ; during 1895, 37 persons, of whom 2 were adult males, 16 females, 12 male children, and 7 female children ; during 1896, sons, of whom 8 were adult males, 3 adult females, 3 male children, female children ; and during 1897, 35 persons, of whom 6 were males, 11 adult females, 8 male children, and 10 female children. y be explained that the persons still assisted in making their o the colony are brought out in terms of a promise made to ants while the system of assisted immigration was in force, namely, f any members of a family choosing to remain behind should ards desire to follow their friends to their new home, they should isted to emigrate on the same terms. To the end of 1897, the d immigrants who arrived in the colony numbered 211,958, viz., men, 81,923 women, 27,254 boys, and 25,936 girls. Of these, have arrived since the year 1861, viz., 28,937 men, 29,090 n, 9,768 boys, and 9,516 girls.

ecorded in the Shipping Office, the persons arriving in the colony during the last ten years were as stated below. The shipping ities do not classify the children according to sex :—

Year.	Adults.			Children.	Total Immigrants.
	Male.	Female.	Total.		
1888	40,295	15,446	55,741	4,435	60,176
1889	39,208	16,719	55,927	4,855	60,782
1890	43,124	19,107	62,231	5,285	67,516
1891	44,519	19,318	63,837	6,082	69,919
1892	39,538	17,757	57,295	4,902	62,197
1893	42,536	18,603	61,139	5,770	66,909
1894	46,917	21,823	68,740	6,848	75,588
1895	46,338	22,719	69,057	6,994	76,051
1896	38,164	18,342	56,506	6,127	62,633
1897	42,270	18,641	60,911	6,105	67,016

departures during the same period were as follow :—

Year.	Adults.			Children.	Total Emigrants.
	Male.	Female.	Total.		
1888	36,278	14,553	50,831	4,070	54,901
1889	32,535	14,030	46,565	3,753	50,318
1890	34,302	15,535	49,837	4,043	53,880
1891	33,877	14,512	48,389	3,684	52,073
1892	33,839	14,828	48,667	4,020	52,687
1893	37,923	16,379	54,302	4,548	58,850
1894	41,060	19,292	60,352	5,624	65,976
1895	40,747	19,549	60,296	6,038	66,334
1896	36,941	18,766	55,707	6,809	62,516
1897	35,931	18,235	54,166	6,244	60,410

The record of the arrivals and departures overland for the las years is as follows :—

Year.	Arrivals.			Departures.		
	Males.	Females.	Total.	Males.	Females.	To
1888	32,868	9,036	41,904	29,502	9,024	38,
1889	44,124	17,231	61,355	44,507	17,215	61,
1890	50,183	19,012	69,195	47,621	17,937	65,
1891	40,826	28,409	69,235	39,631	26,696	66,
1892	37,091	24,959	62,050	37,362	25,372	62,
1893	27,519	17,656	45,175	29,176	20,031	49,
1894	26,247	16,562	42,809	27,328	18,114	45,
1895	33,427	19,368	52,795	35,839	21,286	57,
1896	37,536	21,324	58,860	35,740	21,950	57,
1897	41,234	23,629	64,863	41,698	24,599	66,

THE CENSUS OF 1891.

A Census is taken in New South Wales once in ten years. Th enumeration took place on the night of Sunday, 5th April, 1891 full particulars relating to it will be found in the "General Rep the Eleventh Census of New South Wales," Sydney, 1894.

DISTRIBUTION OF SEXES.

The distribution of the sexes has undergone little change for years past. This will be evident from the following figures, whi the proportions of males and females to the whole population at th four decennial censuses, and at the end of each year since the last was taken :—

Year.	Males.	Females.	Year.	Males.	Females.
1861	56·57	43·43	1893	53·87	46·13
1871	54·67	45·33	1894	53·77	46·23
1881	54·86	45·14	1895	53·62	46·38
1891	54·14	45·86	1896	53·57	46·43
1892	53·98	46·02	1897	53·60	46·40

The excess of male over female population is chiefly at the a 20 to 50 years, and is only what is to be expected in a count ion of which is largely recruited by immigration. It will be ıl, however, that, owing to the lower death-rate of females, the ɔrtion between the sexes is being steadily lessened.

Ages of the People.

Census of 1891 has furnished full particulars with regard to the the people of New South Wales at that date. The table given shows the number of persons, male and female, at each quin ıl period of age. The males in their 21st year numbered 11,224, females, 10,857 :—

Ages.	Total Population.			Per 100,000 of Population.	
	Males.	Females.	Persons.	Males.	Females.
years	84,014	81,736	165,750	13,715	15,728
and under 10	72,895	71,359	144,254	11,900	13,731
„ 15	62,230	61,186	123,416	10,159	11,774
„ 20	54,267	54,476	108,743	8,859	10,483
„ 25	57,963	53,441	111,404	9,462	10,284
„ 30	59,895	46,950	106,845	9,778	9,035
„ 35	52,115	36,690	88,805	8,508	7,060
„ 40	40,380	27,303	67,683	6,592	5,254
„ 45	31,446	22,237	53,683	5,133	4,279
„ 50	27,054	18,658	45,712	4,417	3,590
„ 55	22,753	14,853	37,606	3,714	2,858
„ 60	16,716	10,812	27,528	2,729	2,081
„ 65	12,690	7,762	20,452	2,072	1,494
„ 70	7,030	4,905	11,935	1,148	944
„ 75	5,048	3,692	8,740	824	710
„ 80	2,842	1,903	4,745	464	366
„ 85	1,294	877	2,171	211	169
„ 90	422	284	706	69	55
„ 95	142	79	221	23	15
„ 100	21	27	48	3	5
and over	12	7	19	2	1
ied	1,333	435	1,768	218	84
All ages	612,562	519,672	1,132,234	100,000	100,000

ll be noticed that there is a gradual diminution in the number ɔns at the different periods of age from infancy to old age, the ception being the period between 20 and 25 years of age. The show a steady falling off at each period from the top to the of the column; but the males show an increase in the two from 20 to 25 years and from 25 to 30 years—the ages he physical energies of men should be at the highest point. ıer, the table shows the composition of the people of this colony ach very nearly that of a theoretically perfect community.

living together were decidedly young. Two of the husban of 16 ; six were only 17 years of age ; thirteen were on twenty-one were 19 years of age ; and fifty-nine were only On the other hand, four of the wives were girls of 15 ; one year older ; forty-seven were 17 years of age ; and over were but 18 years old. The ages of the married couples li are given below :—

Ages of Husbands.	Ages of Wives.								
	Under 20	20–24	25–29	30–34	35–39	40–44	45–49	50–59	60–69
Under 20........	53	23	4	..	..	..	..	..	..
20–24	1,101	3,800	798	79	16	8	1	..	..
25–29	956	8,164	9,349	1,647	231	45	12	6	1
30–34	279	3,908	10,710	8,997	1,590	251	60	29	2
35–39	77	1,090	4,661	8,001	6,782	1,261	274	70	16
40–44	18	305	1,406	3,911	5,841	4,886	935	243	11
45–49	8	106	531	1,626	3,214	4,940	4,143	958	25
50–59	6	82	268	791	1,587	3,353	5,781	8,168	[illegible]
60–69	1	12	39	78	187	458	844	4,120	3,08
70 and upwards..	1	...	8	10	23	50	90	652	1,41
Not stated	2	5	5	7	2	3	...	5	..
Wives	2,502	17,495	27,779	25,747	19,473	15,255	12,139	14,242	5,5

While the majority of marriages had evidently been persons of suitable ages, in some cases there was a between the ages of the contracting parties, and the figur not a few very youthful unions. In the table given all under 20 years of age have been classed in one group ; b show that a child of 14 years was married to a man over 2 two girls of 15, to men over 30 years of age ; and two girls over 40 years of age. In three cases, where the wife was still greater disparities were observable, in two of the cas being over 50 years, and in the third case over 70 years it was also disclosed that three girls of 19 were married t years of age, a woman under 30 to a man over 80, and a 40 to a man over 85 years old. On the other hand, in se wife was a great deal older than the husband. For women over 75 years of age were mated with men under over 70 was married to a man under 40 ; and another, ov not yet 30 years of age. Three husbands were set dow years of age, and there were five wives over 95 years youngest husbands were three of 17 years, each of whom to a girl slightly older than himself ; in fact, the united ag couples only amounted to 108. The youngest wife was 1 were twelve wives of 15 years of age ; and ninety-two of 1

The average age of husbands was 41·43 years, and 36·96 years, showing a difference of four years and a half

s. The average age of widows was 55 years. There were 8 under 20 years of age; 4,091 between 20 and 40 years of age; etween 40 and 60 years of age; 10,227 over 60 years of age; vhose ages were not stated.

BIRTHPLACES OF MARRIED PEOPLE.

e 1893 and 1894 editions of this book the nationalities of the married couples who dwelt together on the night of the Census are given. It is there shown that 51,492 husbands were New Velshmen, of whom 41,403 had married natives of the colony; English or Welsh women; 2,146, Irish women; and 1,698, of the neighbouring colony of Victoria. The wives born in outh Wales numbered 69,707. In addition to the 41,403 who rried natives of the colony, 13,670 had married Englishmen or en; 4,644, Irishmen; 2,784, Scotsmen; and 2,334, natives of . In New South Wales there were 5,134 husbands and 6,634 ho claimed Victoria as their birthplace, but in only 1,623 cases h husband and wife hail from that colony. The number of rn in the other Australasian provinces was in every case greater e number of husbands. This was especially the case with nd, the northern colony furnishing 1,155 wives and only bands. In only 60 cases, however, did both husband and wife o Queensland.

RELIGIONS OF MARRIED PEOPLE.

ollowing table shows the religious professions of the 141,656 couples who were living together when the Census was taken :—

Husbands.	Religions of Wives.										
	Church of England.	Roman Catholic.	Presbyterian.	Wesleyan and other Methodist.	Baptist.	Congregationalist.	Lutheran.	Salvation Army.	Other Christian Sects.	Jews.	Other Religions.
ngland ..	55,891	5,832	1,501	1,159	204	202	31	131	73	34	92
olic	3,028	26,258	361	196	17	37	35	13	75	9	27
n	1,978	853	11,247	296	62	60	8	24	28	1	24
and other	954	304	277	13,263	88	44	9	78	21	..	26
....	280	57	58	93	1,481	34	..	11	16	1	3
ealist	277	89	57	79	43	2,957	2	6	8	..	6
....	463	278	108	76	12	26	606	6	15	..	9
rmy	95	25	14	87	3	12	2	1,154	3	..	6
ian Sects..	290	148	56	82	14	25	8	11	1,370	1	26
....	111	28	11	8	..	..	1	1	5	675	2
ons	1,617	770	299	412	106	113	15	47	87	11	2,407

however, it confirms the popular opinion that the length of life enjoyment of which a married person may look forward is greate that of the unmarried, both female and male, at the same age.

FECUNDITY OF MARRIAGES.

The death records of New South Wales show the issue, both and dead, of the deceased. During the five years 1893–7 ther 14,816 married males and 13,460 married females. The ch of these 14,816 men numbered 78,043, giving an average of 5 each married man; and the registrations of death showed that of children 30,370 males and 28,963 females were alive, and 10,054 and 8,656 females were dead. The total issue of the 13,460 m women numbered 69,155 children, or an average of 5·14 to each w and of this number, 25,726 male and 24,860 female children were and 9,776 male and 8,793 female children were dead. An anal the figures shows that at each age at marriage the average num children resulting from the unions was as set down below. necessary to state that in cases where the deceased was married than once, the age at the first marriage only is noted in the table, the total family, whether the fruit of one or of more than one ma is included. The records only reveal five children as the issue of w who married after reaching the age of 45:—

Age at Marriage.	Average number of Children resulting from marriage of—		Age at Marriage.	Average number of Children resulting from marriage of		Age at Marriage.	Average n Child resulting f riag
	Males.	Females.		Males.	Females.		Males.
years.	years.	years.	years.	years.	years.	years.	years.
13	...	8·50	32	4·77	2·72	51	1·52
14	..	5·38	33	5·19	2·75	52	2·21
15	...	7·58	34	4·68	2·37	53	1·26
16	5·64	7·23	35	4·63	2·19	54	0·95
17	5·42	7·03	36	4·88	1·79	55	1·76
18	6·33	6·61	37	4·72	1·58	56	1·36
19	7·28	6·61	38	4·76	1·01	58	0·33
20	6·50	6·11	39	4·16	1·20	59	0·66
21	7·33	5·63	40	4·38	0·77	60	2·21
22	6·35	5·49	41	3·51	0·87	61	0·33
23	6·07	5·24	42	3·25	0·90	62	0·44
24	6·04	5·07	43	3·79	0·70	63	0·20
25	6·03	4·67	44	3·45	0·27	64	1·00
26	5·56	4·30	45	3·54	0·08	66	2·00
27	5·78	4·39	46	3·11	0·08	Not stated	1·84
28	5·42	3·98	47	3·64	0·16		
29	5·30	3·65	48	2·89	0·28		
30	5·13	3·57	49	4·16	...	Average..	5·26
31	4·63	3·08	50	2·40	...		

ting minister duly registered for that purpose; but it is provided in cases where the contracting parties conscientiously object to a ous ceremony, or where the services of a minister are not available, may sign a declaration to that effect, and be married by a District trar. The Act further provides for the signing of a declaration th parties to the effect that they believe there is no impediment in ay of or lawful objection to their marriage on account of relation- former marriage, want of consent in case of minors, or on other ds. The written consent of the father must be produced by a minor. uld the father not reside in New South Wales, of the mother or ian, and in the absence of these, of a magistrate specially appointed ive consent to the marriage of minors." The marriage ceremony is celebrated in the presence of two witnesses. Penalties for wilfully ing minors, or for aiding and abetting in doing so, are imposed, aximum being a fine of £500, or imprisonment for five years. ry in connection with forms of consent, etc., is punishable with ears' hard labour or hard labour on the roads.

t 19 Vic. No. 34, "An Act for Registering Births, Deaths, and iages," provides for the registration of officiating ministers, and for ansmission by them to the District Registrars of copies of certifi- District Registrars are to forward these copies to the General try Office, where they are indexed for future reference. Act 42 No. 5, the "Clergy Returns Transfer Act," provided for the handing to the General Registry Office of registers previously kept by in of the clergy. Act 55 Vic. No. 34, the "Marriages Validation Marriage Law Amendment Act," validated marriages, celebrated the passing of Act 19 Vic. No. 30, in which the required declaration ot been signed, and provided that the declaration should from that be endorsed on the back of the marriage certificate, omission to do ing made punishable as a misdemeanour.

MARRIAGES.

to the year 1891 the increase in the number of marriages rated in New South Wales was remarkably steady, very few checks experienced; indeed, during the eleven years extending from 1875 886 the progress was uninterrupted. But in 1892, despite the th of population, there was a heavy fall in the number, and this ne continued until 1895, when the figures again took an upward ment, evidencing the existence of a feeling in the community that louds of depression were gradually lifting from the colony. An ination of the annual marriage rates given below will show that a d tendency to a fall was exhibited between 1883 and 1891, the declining from 8·83 to 6·20 per 1,000 of the population during the n years. In 1895, however, as already remarked, an improvement place, and in 1897 the marriage rate of the colony was the highest statistics which throw any light on this point are much to be desi As far as New South Wales is concerned, the information at pre available covers only the period of a few years; nevertheless the fig possess very great interest. Dealing only with legitimate natality, number of births within the period 1893–5 was 110,597: and with adjustment of the ages of the parents as returned, in order to counte the recognised tendency of the people to state their ages at the nea quinquennial period, such as 20, 25, 30, 35, and so on, it would app that the probability of a birth in the course of a year from a union which the age of the husband is between 25 and 60 and the age of wife between 20 and 40 is as follows:—

Age of Husband.	Age of Wife.				
	20 years.	25 years.	30 years.	35 years.	40 years
	per cent.	per cent.	per cent.	per cent.	per cent.
25 years ...	42·6	39·3	36·0	30·0	25·8
30 years ...	42·0	38·3	34·0	31·0	25·0
35 years ...	42·7	36·7	32·6	30·0	25·7
40 years ...	42·6	35·5	30·2	28·5	24·1
45 years ...	40·0	31·3	27·9	26·5	22·2
50 years ...	34·5	27·3	25·8	24·2	20·8
55 years ...	26·8	25·1	24·0	23·0	18·7
60 years ...	24·3	23·2	22·6	21·0	15·5

The age of the wife is by far the more important factor in determi the birth-rate. As that advances, it is seen that there is a sharp de in the probability of child-birth at each quinquennial period of life, tendency being towards a heavier fall at each successive stage. the other hand, with a young wife of 20 years the percental b rate remains about the same until the husband passes the age of and even in cases in which the woman is considerably older, probability of birth at any fixed period of life only becomes gr diminished after the man has passed the fortieth year. Thus, a wes her high rate to the comparatively large number of celebrated in that colony during the five years from 1887 From 1861 to 1886 the rate of New South Wales was y higher than that of the southern colony. During the next however, Victoria had the advantage, only to lose it in 1892, h year New South Wales has again had the higher rate.

ten years ended 1897 the colonies which had a marriage- the Australasian average were:—

stern Australia	8·12	per 1,000 of population.
toria..............................	6·99	,, ,,
eensland	6·84	,, ,,
w South Wales	6·79	,, ,,

ch had a lower rate were:—

ıth Australia	6·32	,, ,,
w Zealand........................	6·25	,, ,,
smania	6·17	,, ,,

arison of the marriage-rates of various countries is apt to be misı account of the different conditions of life prevailing therein. mparing the Australian rate with the rates of foreign countries, e borne in mind that, on the one hand, the superior condition king classes and the preponderance of unmarried adult males nies favour a high marriage-rate; while, on the other hand, tory habits of a large part of the male population often certain amount of extravagance and selfishness, and tend, to a diminution of the rate. Below will be found the average ates of a number of European countries for the twenty years, ınd the annual rates for the years 1891 to 1896. The figures, taken from the reports of the Registrar-General of England, in Europe, as in New South Wales, the course of the ate has been directed upward during the last three or four

r.	Average of 20 years, 1871-90.	1891.	1892.	1893.	1894.	1895.	1896.
gdom...	7·2	7·3	7·3	7·0	7·1	7·2	7·5
Wales	7·8	7·8	7·7	7·4	7·5	7·5	7·9
....	7·0	7·0	7·1	6·6	6·7	6·9	7·2
....	4·5	4·6	4·7	4·7	4·7	5·0	5·0
....	7·6	6·8	6·8	7·0	6·9	7·1	7·3
....	6·9	6·6	6·4	6·4	6·4	6·5	6·7
....	6·6	5·8	5·7	5·7	5·7	5·8	.....
....	8·2	7·7	7·8	7·9	7·9	8·1	8·0
....	9·6	8·6	9·2	9·3	9·3	8·5	8·0
....	7·4	7·1	7·4	7·4	7·4	7·5	7·8
pire ...	8·2	8·0	7·9	7·9	7·9	7·5	8·2
....	8·4	8·2	8·1	8·1	8·1	8·0	8·3
....	7·6	7·1	7·2	7·3	7·2	7·4	7·5
....	7·1	7·5	7·7	7·6	7·5	7·7	8·1
....	7·7	7·4	7·5	7·5	7·5	7·4	7·6
....	7·8	7·6	7·5	7·5	7·5	7·4	7·1

detail. The appended table, therefore, only shows the
grounds, chief amongst which are adultery, deserti
habitual drunkenness :—

Grounds of Suit.	Divorces (Decrees *Nisi*) Granted.	Judicial Separation Granted.
Adultery	688	16
,, with habitual drunkenness, etc.	38	2
Adultery, with cruelty, desertion	268	21
Bigamy, with adultery	31	....
Incestuous adultery	2	....
Desertion	713	2
Cruelty	20	37
,, and desertion	18	1
Habitual drunkenness, with cruelty, desertion	194	12
Imprisonment for three years	17	....
Frequent conviction for crime	1	....
Non-consummation of marriage	2	....
Lunacy of petitioner	....	....
Cruelty and attempt to murder by administering poison	1	....
Total	1,993	91

Of the 1,993 divorce decrees granted up to the end
grounded on the act of adultery, 2 on incestuous ad
adultery with bigamy, the respondent having broken
through a form of marriage, making altogether a tota
and if to this number be added those cases in which a
with habitual drunkenness, cruelty, or desertion, or
all three of these grounds, no less than 1,027 decrees
51·5 per cent. of the total number of 1,993. Deser
cause of dissolution of marriage. On this ground
713 decrees, or 35·8 per cent. of the total, were
details disclose the fact that in 279 other cases in w
granted the petitioner had been deserted by the res
20 cases of divorce was a decree granted because of
there were 333 other cases in which cruelty was al
drunkenness was the principal ground on which the p
in 194 cases; but in only 3 cases was this a single
drunkenness in the other 191 cases being allied with
and neglect of domestic duties; while in 34 additio
habitual drunkenness was set forth with other reason
petitioner to a dissolution of the marriage bond. Alto
habitual drunkenness entered into 228 cases out of
divorce was granted, or 11·5 per cent.

,100 marriages which resulted in divorce or judicial separation,
were nullified, the great majority were celebrated in the
an colonies, and more than three-fourths in New South
ne. The actual number celebrated in this colony was 1,647,
r cent. of the total number; and in all Australasia, 1,901, or
nt. Of the other 199 marriages, 167, or 8·0 per cent., took
e United Kingdom, namely, 140 in England, 9 in Wales, 9
l, and 9 in Ireland. The countries where the other marriages
rated will be found in the following table :—

elebrated in—	Divorces and Judicial Separations.	Marriages celebrated in—	Divorces and Judicial Separations.
Wales…………	1,647	Hongkong………………	1
…………………	108	India………………………	8
…………………	57	Cape Colony………………	3
alia……………	22	Canada……………………	2
istralia………	1	Denmark…………………	1
…………………	15	Italy………………………	1
d………………	51	France and New Caledonia	4
…………………	140	Germany…………………	1
…………………	9	Russia……………………	2
…………………	9	United States……………	6
…………………	9		
…………………	3	Total…………	2,100

gh the Roman Catholic Church does not recognise divorce, yet
able number of marriages solemnised according to the rites of
ch have been dissolved by the law. Still, the figures are by
large when they are viewed in connection with the number
marriages which had been celebrated by denominations whose
form much smaller proportions of the population of the colony.
of the 2,100 divorces, judicial separations, and petitions for
marriage granted to the end of 1897, only 210 of the marriages
solemnised by the Roman Catholic Church, while the Church
d had solemnised 846; the Presbyterians, 345; and the
and other Methodist Churches, 213. The Congregational
ad celebrated 158 of the marriages; the Baptist, 36; the
.7; and other denominations, 30; while the ceremony in 214
been performed at a Registrar's office, and in the remaining
he Church was not stated.

2,084 couples who were divorced or judicially separated, and
ples whose marriage was declared null, 196, or 9·3 per cent.
al of 2,100, had been married for a period of less than 5
less than 715, or 34·0 per cent. of the whole number, had
ied for periods ranging from 5 to 10 years; 597, or 28·4 per
veen 10 and 15 years; and 326, or 15·5 per cent., between
years. In no less than 215 cases the duration of the marriage
een 20 and 30 years; while in 51 cases the period was even

figures the important fact is established that in 1896 the rate of South Wales, which was 28·35 for that year, had fallen below t the great majority of European countries. The information i table is taken from the report of the Registrar-General of Englan figures covering the period of twenty-six years from 1871 to 1896

Country.	1871–90.	1891.	1892.	1893.	1894.	1895.
United Kingdom	32·6	30·4	29·5	29·9	28·9	29·5
England and Wales	34·0	31·4	30·5	30·8	29·6	30·4
Scotland	33·6	31·2	30·8	31·0	30·2	30·4
Ireland	24·9	23·4	22·5	23·0	22·9	23·2
France	24·6	22·6	22·1	22·9	22·4	21·9
Switzerland	29·4	28·2	27·9	28·4	27·9	28·0
Italy	37·3	37·3	36·3	36·7	35·7	35·1
Germany	38·1	37·0	35·7	36·8	35·9	36·1
Prussia	38·2	37·7	36·2	37·4	36·5	36·9
Austria	38·6	37·0	36·2	37·9	36·7	38·1
Hungary.......	44·0	42·3	40·3	42·5	41·3	41·5
Holland	35·2	33·7	32·0	33·8	32·7	32·8
Belgium	31·0	29·6	28·9	29·5	29·0	28·5
Denmark	31·7	31·0	29·5	30·6	30·2	30·2
Norway	30·7	30·9	29·6	30·7	29·8	30·6
Sweden	29·9	28·3	27·0	27·4	27·1	27·5

In New South Wales the births increased year by year from 1 1893, and, although they have diminished since that time, the exceed those of the other great colony. The superiority in r rested with Victoria until the year 1879, when the births in South Wales exceeded those of her southern neighbour During each of the last eighteen years the excess has been maint the greatest being in 1897, when it reached 5,945.

In no year, as far as observation extends, have the female exceeded in number those of males. The preponderance of bir male children in New South Wales during a number of years w seen from the table given below. The figures are exclusive of ch stillborn, the births of which are not required to be registered

Year	Males.	Females.	Total.	Year.	Males.	Females.
1871	10,326	9,817	20,143	1893	20,822	19,520
1876	11,791	11,507	23,298	1894	19,993	18,958
1881	14,891	14,102	28,993	1895	19,877	18,897
1886	18,700	17,584	36,284	1896	18,691	17,815
1891	20,386	19,072	39,458	1897	18,989	18,258
1892	20,532	19,509	40,041			

The excess of males over females born during the past twenty years has ranged from 2·08 per cent. in 1875 to 7·65 per cent. in verage being 5·01 per cent. The following table shows the number les born to every 100 females :—

Year.	Males born to every 100 females.	Year.	Males born to every 100 females.
1871	105·18	1893	106·67
1876	102·47	1894	105·46
1881	105·59	1895	105·19
1886	106·35	1896	104·92
1891	106·89	1897	104·00
1892	105·24		

number of theories have been advanced as accounting for the tion in the proportion of male to female births, but as none finds ort in the vital statistics of New South Wales, it is needless to ss them here. It is the case that in some years the illegitimate s in the colony show a majority of female children, and during the wenty-seven years the proportion of male to 100 female illegitimate s has ranged from 94·96 in 1873 to 121·96 in 1876. Excluding illegitimates, the variation in the excess of males over females ranged from 1·71 per cent. in 1876 to 8·06 per cent. in 1889.

rths are more numerous in spring than in any other part of the , and are fewest in the March quarter. This is found to be the case e other colonies of Australasia as well as in New South Wales. following table gives the number of births in each quarter of the since 1878 :—

	Quarter ending				Year.	Quarter ending –			
	31 March.	30 June.	30 September.	31 December.		31 March.	30 June.	30 September.	31 December.
8	5,962	6,165	6,976	6,225	1888	9,058	9,651	10,162	9,654
9	6,231	6,591	7,264	6,847	1889	9,125	9,292	9,635	9,243
0	6,590	7,116	7,230	7,226	1890	9,154	9,667	10,497	9,642
1	6,976	6,983	7,514	7,520	1891	9,161	9,662	10,345	10,290
2	7,195	7,273	7,827	7,407	1892	9,753	10,361	9,655	10,272
3	7,378	7,755	8,000	8,148	1893	9,610	10,187	10,578	9,967
4	8,141	8,443	9,160	8,202	1894	9,619	9,981	9,551	9,800
5	8,178	8,508	9,656	8,701	1895	9,394	9,336	10,080	9,964
6	8,451	8,976	9,592	9,265	1896	9,294	9,031	9,153	9,028
7	9,075	9,183	9,890	9,088	1897	8,913	9,306	9,797	9,231

eparating the colony into the metropolitan and country districts, it l be seen from the following table that during recent years the birth- per thousand has been higher in the metropolis than in the ainder of the colony. This is due to the proportionately larger nber of females in the metropolitan population as compared with country population, among whom males largely predominate. The hest rate reached for the whole of New South Wales during the last enty years was 38·99 in 1879. The estimated maximum rate for the metropolis was reached in 1885, when the births were 45·46 per of the population. In the country districts the greatest births in proportion to the population occurred in 1879, when was 38·92 per thousand :—

Year.	Births per thousand of the population.			Year.	Births per thousand of the population.	
	Metropolis.	Country.	New South Wales.		Metropolis.	Country.
1878	38·15	38·65	38·50	1888	41·92	35·92
1879	39·18	38·92	38·99	1889	38·73	33·18
1880	39·00	38·73	38·81	1890	37·23	34·44
1881	39·21	37·34	37·90	1891	35·95	33·76
1882	40·23	35·90	37·20	1892	34·70	33·48
1883	40·81	35·82	37·32	1893	33·52	33·23
1884	44·70	35·75	38·44	1894	31·65	31·38
1885	45·46	35·18	37·79	1895	30·67	30·63
1886	44·53	34·32	37·43	1896	30·06	27·63
1887	43·21	34·31	37·06	1897	29·00	28·15

The excess of births over deaths has not shown a steady increase year, but has fluctuated somewhat, as will be seen from the table. In the whole colony, during the twenty years from 1878 the least excess was 14,565 in 1878, and the highest 25,631 in 1892. In the metropolis the least excess was in 1878, viz., the highest in 1892, when the number reached 8,558. In the districts the number ranged from 11,379 in 1878 to 17,073 in

Year.	Metropolis.	Country Districts.	New South Wales.	Per cent. of population at end of previous year.
1878	3,186	11,379	14,565	2·28
1879	3,947	12,786	16,733	2·49
1880	3,434	13,497	16,931	2·39
1881	4,560	12,897	17,457	2·33
1882	4,608	12,278	16,886	2·16
1883	5,342	13,690	19,032	2·33
1884	5,946	13,780	19,726	2·29
1885	5,773	13,988	19,761	2·18
1886	6,860	14,837	21,697	2·28
1887	7,874	15,914	23,788	2·40
1888	7,449	16,668	24,117	2·36
1889	7,006	15,493	22,499	2·14
1890	7,938	16,804	24,742	2·29
1891	7,588	15,584	23,172	2·07
1892	8,558	17,073	25,631	2·14
1893	7,472	16,848	24,320	2·03
1894	7,406	16,328	23,734	1·94
1895	7,276	16,584	23,860	1·91
1896	6,713	13,954	20,667	1·62
1897	6,789	16,194	22,983	1·77

The mean annual increase to the population by reason of the excess births over deaths amounts to 2·17 per cent. for a period extending r twenty years—that is, going back to the year 1878. Notwithstanding the fact that the males born are more numerous than ales, the actual increase of population from the excess of births over ths is greatly in favour of the females. The male population largely eeds the female, and there is a correspondingly larger number of ths of males. There is also a greater mortality amongst male than ongst female children, and from this cause alone the natural excess male births is almost neutralised. During the ten years which closed h 1897, the number of females added to the community by excess of ths exceeded the males by 15,025, or 13·61 per cent.

AGES OF PARENTS.

During the five years 1893–97 the ages of the women giving birth children ranged from 12 to 58 years. As might be expected, the jority of the very young mothers were unmarried; thus of 2,258 thers under 18 years of age, 1,238 were unmarried. The total number married women who gave birth to children during the five years s 177,582, the ages of whom were as follow :—

Ages of Married Mothers.	Number of Mothers.	Ages of Married Mothers.	Number of Mothers.
14 years	4	35 years and under 40	28,640
15 "	34	40 " " " 45	10,552
16 "	194	45 years	570
17 "	788	46 "	298
18 "	1,835	47 "	160
19 "	3,330	48 "	74
20 "	4,545	49 "	31
21 "	6,510	50 "	6
22 "	8,059	52 "	3
23 "	9,266	53 "	1
24 "	9,865	55 "	2
25 "	10,074	56 "	1
26 "	10,552	58 "	1
27 "	10,203	Not stated	14
28 "	10,435		
29 "	9,538		
30 years and under 35	41,997	Total	177,582

It will be seen that in two cases the age of the mother is stated as years; in another case, as 56 years; and in still another case, as As these four cases were outside the usual experience, inquiries made, with the result that the accuracy of the records was confirm It may be mentioned that in the first two cases the ages of the fat were 45 and 55 years; in the second case, 58 years; and in the t case, 64 years.

The average age of the fathers was about 5·41 years higher than of the mothers. During the five years 1893–97, the ages of the fat ranged from 17 to 84 years, as shown below:—

Ages of Fathers.	Number of Fathers.	Ages of Fathers.	Number of Fathers.
17 years	6	66 years	25
18 ,,	61	67 ,,	20
19 ,,	209	68 ,,	20
20 ,,	517	69 ,,	17
21 ,,	1,451	70 ,,	13
22 ,,	2,561	71 ,,	6
23 ,,	3,828	72 ,,	7
24 ,,	5,118	73 ,,	4
25 ,,	6,107	74 ,,	1
26 ,,	7,206	75 ,,	5
27 ,,	7,995	76 ,,	1
28 ,,	8,840	77 ,,	3
29 ,,	9,524	78 ,,	2
30 years and under 35	46,619	79 ,,	1
35 ,, ,, 40	38,313	80 ,,	1
40 ,, ,, 45	21,849	82 ,,	1
45 ,, ,, 50	10,850	83 ,,	1
50 ,, ,, 55	4,435	84 ,,	1
55 ,, ,, 60	1,469	Not stated	22
60 ,, ,, 65	434		
65 years	39	**Total**	**17**

Birthplaces of Parents.

ulation of the birthplaces of the 355,164 parents mentioned ows that of the fathers, 95,133 were born in New South 11,668 in Victoria; 1,783 in Queensland; 3,611 in South ; 108 in Western Australia; 1,536 in Tasmania; and 1,619 in land. The total number of Australasian-born fathers was, , 115,458. Of Australasian-born mothers there were 141,332, 7,845 natives of New South Wales; 12,974 of Victoria; 2,895 of nd; 4,393 of South Australia; 121 of Western Australia; 1,449 nia; and 1,655 of New Zealand. In 79,953 cases both father er were natives of New South Wales; and in 104,611 cases they ives of one or other of the Australasian colonies.

were 53,607 fathers born in the United Kingdom, viz.:—rn in England, 1,195 in Wales, 8,009 in Scotland, and 11,987 in Mothers born in the United Kingdom numbered only 33,196, 8,117 English; 708 Welsh; 4,657 Scotch; and 9,714 Irish. In ses both parents were born in the United Kingdom; in 9,592 h were English; in 218 cases both Welsh; in 2,293 cases both and in 4,821 cases both Irish.

s born in other British colonies and possessions numbered 959, 99 born in Asiatic possessions; 193 born in various African ns; 290 in Canada and Newfoundland; 89 in the West Indies, lsewhere. Of 539 mothers, 220 were born in Asiatic posses- 26 in African possessions; 70 in Canada; 20 in the West Indies; elsewhere.

n-born fathers were more numerous. Amongst them were ermans, 361 Frenchmen, 450 Russians, 137 Austrians, 513 ,230 Swedes and Norwegians, 362 Italians, 474 natives of other n countries, 308 Chinese, 58 natives of other Asiatic countries, s of African countries, 687 natives of the United States, 63 f other American countries, and 27 Polynesians; total, 6,956. foreign-born mothers, 755 were German, 117 French, 145 30 Austrian, 107 Danish, 70 Swedish or Norwegian, 200 167 natives of other European countries, 97 natives of China, er Asiatic countries, 4 of African countries, 283 of the United 3 of other American countries, and 26 of Polynesia. There y 1,198 cases in which both parents were foreign-born.

s the fathers enumerated above, there were 586 who were sea, and 16 whose birthplaces were not stated. Of mothers there 5 born at sea, and 16 whose birthplaces were not stated.

Birth of First Child.

eriod elapsing from the date of marriage to the birth of the ild has been ascertained only for the five years 1893 to 1897. tal number of first births occurring during that period was

34,191. The time which had elapsed since the ceremony of mari was performed is shown in the following table:—

Period.	Number of First Births.	Period.	Number of First Births.	Period.	
1 month and under	1,081	16 months ...	785	9 years	
2 months	995	17 " ...	630	10 "	
3 "	1,276	18 " ...	533	11 "	
4 "	1,357	19 " ...	488	12 "	
5 "	1,510	20 " ...	460	13 "	
6 "	1,582	21 " ...	408	14 "	
7 "	1,597	22 " ...	351	15 "	
8 "	1,560	23 " ...	326	16 "	
9 "	3,745	2 years ...	2,112	17 "	
10 "	3,657	3 "	793	18 "	
11 "	2,538	4 "	380	22 "	
12 "	1,918	5 "	208		
13 "	1,386	6 "	138	Total ...	34,
14 "	1,105	7 "	85		
15 "	926	8 "	69		

It will be seen that of the 34,191 first births 14,703, or 43·0 per c occurred before ten months had elapsed from the date of marriage; 10,958, or 32·0 per cent., within nine months after marriage.

Excluding births occurring within nine months of marriage, average period elapsing from the date of marriage to the birth o first child in fruitful unions is 1·628 years (1 year 7½ months). will be seen from the following table, the average period of fruitful of women married at various ages rises gradually as the age increase

Age of Mothers.	Number of Mothers.	Average Period elapsing from Marriage to First Confinement.
		years.
Under 20 years	2,132	1·253
20 and under 25	10,634	1·375
25 " 30	7,113	1·669
30 " 35	2,427	2·293
35 " 40	753	2·855
40 " 45	159	5·733

Of the wives who gave birth to children during the five y ended 1897, the date of marriage was given in 177,573 cases, and f the particulars thus gleaned it would appear that out of every 100, children, 9,497 will be born within a year of their parents' marri 31,063 in one and less than five years; 26,816 in five and less than years; 18,315 in ten and less than fifteen years; 9,822 in fifteen less than twenty years; 3,826 in twenty and less than twe years; 636 in twenty-five and less than thirty years; and 25 in years or more.

ILLEGITIMACY.

tement of the number of illegitimate births in New South given below. Taking the whole period over which the table it will be seen that the percentage has increased throughout y, notably in the city and suburbs of Sydney :—

Number of Illegitimate Births.			Percentage of Total Births.		
Metropolis.	Country Districts.	New South Wales.	Metropolis.	Country Districts.	New South Wales.
425	596	1,021	5·94	3·28	4·03
506	709	1,215	6·44	3·72	4·51
561	665	1,226	6·71	3·36	4·35
592	671	1,263	6·64	3·34	4·36
601	660	1,261	6·24	3·28	4·24
676	642	1,318	6·59	3·05	4·21
786	709	1,495	6·62	3·21	4·40
845	767	1,612	6·89	3·37	4·60
905	782	1,687	6·89	3·38	4·65
873	838	1,711	6·50	3·52	4·59
1,049	909	1,958	7·65	3·66	5·08
1,066	921	1,987	7·99	3·84	5·33
1,056	995	2,051	7·81	3·91	5·26
1,149	966	2,115	8·20	3·80	5·36
1,242	1,047	2,289	8·83	4·02	5·71
1,257	1,253	2,510	9·01	4·75	6·22
1,204	1,233	2,437	9·13	4·79	6·26
1,219	1,305	2,524	9·55	5·02	6·51
1,189	1,256	2,445	9·66	5·19	6·70
1,176	1,276	2,452	9·79	5·06	6·58

ng the years since 1871 into quinquennial periods, the average llegitimate births as compared with the total number of births, ppended :—

Quinquennial Period.	Metropolis.	Remainder of Colony.	New South Wales.
	per cent.	per cent.	per cent.
1871–75	5·11	3·72	4·09
1876–80	6·21	3·44	4·22
1881–85	6·60	3·25	4·36
1886–90	7·37	3·67	4·90
1891–95	8·93	4·38	6·01
1896–97	9·72	5·12	6·64

ly the smaller proportion of illegitimate births noticeable in try districts is to some extent due to the fact that women who have fallen come to Sydney to hide their shame. The table given b showing the number of accouchements at the Benevolent Asyl certainly gives colour to this supposition, for out of the large num of unmarried women whose confinements took place in that institut it is only reasonable to suppose that the country contributed a consi able quota :—

Year.	Confinements.			Year.	Confinements.		
	Total.	Married Females.	Unmarried Females.		Total.	Married Females.	[illegible]
1865	129	50	79	1882	237	45	[illegible]
1866	129	51	78	1883	210	33	[illegible]
1867	121	44	77	1884	305	84	[illegible]
1868	102	46	56	1885	262	55	[illegible]
1869	112	40	72	1886	300	71	[illegible]
1870	95	29	66	1887	257	76	[illegible]
1871	117	54	63	1888	281	70	[illegible]
1872	102	37	65	1889	252	48	[illegible]
1873	107	27	80	1890	266	35	[illegible]
1874	126	36	90	1891	324	61	[illegible]
1875	113	30	83	1892	339	54	[illegible]
1876	156	38	118	1893	338	64	[illegible]
1877	169	41	128	1894	393	80	[illegible]
1878	160	38	122	1895	385	89	[illegible]
1879	203	45	158	1896	354	67	[illegible]
1880	233	51	182	1897	302	56	[illegible]
1881	225	50	175				

The rate of illegitimacy in New South Wales is higher than in of the other Australasian colonies, higher than the general rate of United Kingdom, higher than in England, Wales, and Ireland, lower than in Scotland and in most of the continental countri Europe. Moreover, illegitimacy in New South Wales is increa while in the United Kingdom it is decreasing. The following fig showing the rate of illegitimacy per 100 births in the Austral colonies and in the United Kingdom, are based on a period of years :—

Country.	Illegitimate births per cent.	Country.	Illegitimate births per cent.
New South Wales......	6·45	Tasmania	5·20
Victoria	5·47	New Zealand.........	4·18
Queensland...............	5·13	England and Wales.	[illegible]
South Australia.... .. .	5·92	Ireland	[illegible]
Western Australia ...	4·92	Scotland	[illegible]

number of children born in Australasia during the five 897, 5·54 per cent. were illegitimate, as compared with in the United Kingdom during the five years 1892–96. comparison to be made with the chief countries of Conti- the following table has been compiled. The rates are five years 1890–94. In a majority of the countries gitimacy seems to be on the increase :—

untry.	Illegitimate births per cent.	Country.	Illegitimate births per cent.
	9·08	France	8·65
	7·66	Belgium	8·81
	14·09	Netherlands	3·16
	12·33	Sweden	10·35
	14·66	Norway	7·09
	9·11	Italy	7·01

the illegitimate births in New South Wales with the nales between the ages of 17 and 45, it will be found iber 2,230 per 100,000, the proportion at different ages as follows :—

Ages.	Mothers of Illegitimates per 100,000 Unmarried Women.
urs	1,234
,	1,778
,	2,191
urs and under 25	2,547
, ,, 30	2,574
, ,, 35	2,699
, ,, 40	2,600
, ,, 45	856

of which the foregoing figures represent the average y five years, and it is probable that a greater experience hat for all ages from 20 to 45, 2·75 per cent. of unmarried irth to children.

hs of illegitimate children in 1893–97 be compared with iber of confinements, it will be found that for all ages the illegitimates is 6·47 per cent. Excluding ages under 15, during the five years 1893–97 the proportion of illegitimate to total confinements is as follows:—

Ages.	Percentage of Illegitimate to total Confinements.
15 and under 20 years	34·99
20 ,, 25 ,,	11·10
25 ,, 30 ,,	4·03
30 ,, 35 ,,	2·46
35 ,, 40 ,,	2·25
40 ,, 45 ,,	1·89

Although there are instances in which a woman has a nu
family of illegitimate children, illegitimate births are, for the m
first births. If, then, the illegitimate births, the births of chil
probably conceived before the marriage of their parents—that is t
births which have taken place within nine months of marriage—
ordinary first births, are set down side by side in various groups ac
ing to the ages of the mothers, some very striking results are obtain
results which afford matter for very serious reflection. The figur
given in the following table, and cover a period of five years:—

Age Group.	Illegitimate Births.		Legitimate Births.			
			Within 9 months of marriage.		9 months and	
	Number.	Per cent. of First Births.	Number.	Per cent. of First Births.	Number.	Per of Bi
15 and under 20 years	3,327	40·29	2,798	33·89	2,182	2
20 ,, 25 ,,	4,775	22·63	5,691	26·97	10,634	5
25 ,, 30 ,,	2,137	19·37	1,782	16·15	7,113	6
30 ,, 35 ,,	1,061	26·81	470	11·87	2,427	6
35 ,, 40 ,,	669	41·97	172	10·79	753	4
40 ,, 45 ,,	194	49·87	36	9·26	159	4

For all ages from 15 to 45 years the number of illegitimate b
forms 26·25 per cent. of the first births, reckoning the illegitima
first births; the number of children born within nine months of ma
equals 23·63 per cent.; while the number of children born nine m
and upwards from date of marriage equals 50·12 per cent., or
more than one-half of the total. These figures throw a stro
light on the morals of the community. It unfortunately happen
a comparison cannot be made with previous years, and it can
fore be stated whether the moral condition is in any degree b
worse than formerly.

s already been stated that some of the mothers of illegitimate n are very young. This will be seen from the following table, g the ages of the females who gave birth to illegitimate children the five years 1893–97 :—

Mothers.	Number of Mothers.	Ages of Mothers.	Number of Mothers.	Ages of Mothers.	Number of Mothers.
....	1	26 years	495	40 years	64
....	7	27 ,, ...	413	41 ,, ...	33
....	47	28 ,, ...	381	42 ,, ...	54
....	130	29 ,, ...	292	43 ,, ...	34
....	342	30 ,, ...	306	44 ,, ...	9
....	710	31 ,, ...	185	45 ,, ...	12
....	1,000	32 ,, ...	203	46 ,, ...	8
....	1,145	33 ,, ...	180	47 ,, ...	1
....	1,151	34 ,, ...	187	48 ,, ...	2
....	1,114	35 ,, ...	179	50 ,, ...	4
....	978	36 ,, ...	146	55 ,, ...	1
....	851	37 ,, ...	129	Not stated	36
....	681	38 ,, ...	109	Total	12,282
....	556	39 ,, ...	106		

birthplaces of the mothers of illegitimate children were as :—New South Wales, 9,113 ; Victoria, 793 ; Queensland, 346 ; Australia, 218 ; Western Australia, 6 ; Tasmania, 106 ; New d, 183 ; England, 820 ; Wales, 35 ; Scotland, 155 ; Ireland, ther British possessions, 20 ; Germany, 45 ; United States, 13 ; oreign countries, 38 ; at sea, 13 ; not stated, 37.

,801 infants who died in the colony during the year 1897 before ad attained the age of 12 months, 3,163 were legitimate, and legitimate ; and of 4,940 children who died before they had d the age of 5 years, 4,224 were legitimate, and 716 illegitimate, this it would appear that while the death-rate of all children 1 year of age was 103·08 per thousand, and of all children 5 years of age, 25·87 per thousand, the death-rate of legitimate en of less than 12 months was 91·88 per thousand, and of legi- children under 5 years of age, 23·34 per thousand ; and the rate of illegitimates under 12 months of age was 260·51 per nd, and under 5 years of age, 58·51 per thousand. These disclose the fact that the death-rate of illegitimates under 1 as 183·53 per cent. higher than that of legitimates, and that the death-rate of illegitimates under 5 years was 150·58 per cent. than that of legitimates. In other words, the probability of a legi child in New South Wales reaching the age of 5 years is abo and a half times greater than that of an illegitimate child.

TWINS AND TRIPLETS.

During the year 1897 there was one case of triplets, com 3 males. Twins numbered 417 cases, comprising 415 males an females—in all, 833 children, one infant having been still-born. was also one quartette, consisting of 3 male children born alive still-born. The number of children born as quadruplets, triple twins formed 2·24 per cent. of the total births.

District.	Triplets.				Twins.		
	No. of cases.	M.	F.	Total.	No. of cases.	M.	F.
Sydney............	...	...	...	...	24	28	20
Suburbs..	1	3	...	3	107	106	108
Country...........	..	...	...	...	286	281	290
Total	1	3	...	3	417	415	418

The following table shows the number of twins and triplets b New South Wales during the last ten years, excluding those still-bo

Year.	Triplets.				Twins.		
	No. of cases.	M.	F.	Total living at Birth.	No. of cases.	M.	F.
1888	1	1	2	3	363	371	355
1889	1	2	1	3	329	358	298
1890	1	3	......	3	398	405	391
1891	......	......	......	......	393	388	397
1892	6	8	10	18	328	332	323
1893	5	8	7	15	408	400	414
1894	3	4	4	8	365	362	367
1895	6	12	6	18	396	396	395
1896	2	2	4	6	335	335	334
1897	1	3	......	3	417	415	418
Ten years...	26	43	34	77	3,732	3,762	3,692

There were also quartettes in 1888, 1893, 1895, and 1897.

As shown in the foregoing table, there were 3,732 cases of 26 cases of triplets, and 4 quartettes during the ten years e total number of confinements recorded during this period was 382,315. follows, therefore, that one mother in every 102 gave birth to twins; e mother in every 14,704 was delivered of three children, and one in ery 95,579 of four children at a birth.

The ages of the mothers of all twins born during 1893-97 were as low:—

Ages of Mothers.	Number of Confinements.	Ages of Mothers.	Number of Confinements.
13 years	1	27 years	90
16 ,,	2	28 ,,	109
17 ,,	7	29 ,,	118
18 ,,	8	30 years and under 35	555
19 ,,	18	35 ,, ,, 40	443
20 ,,	31	40 ,, ,, 45	131
21 ,,	41	45 ,,	4
22 ,,	43	46 ,,	4
23 ,,	70	49 ,,	1
24 ,,	70		
25 ,,	83	Total	1,921
26 ,,	92		

The ages of 87 unmarried mothers who gave birth to twins are cluded in the above table.

The ages of the fathers, excluding the 87 cases in which the children re illegitimate, are shown in the following table:—

Ages of Fathers.	Cases of Twins.	Ages of Fathers.	Cases of Twins.
21 years	10	40 years and under 45	250
22 ,,	12	45 ,, ,, 50	131
23 ,,	26	50 ,, ,, 55	64
24 ,,	36	55 ,, ,, 60	25
25 ,,	40	60 years	2
26 ,,	39	62 ,,	2
27 ,,	55	63 ,,	1
28 ,,	77	66 ,,	1
29 ,,	79	75 ,,	1
30 years and under 35	478		
35 ,, ,, 40	505	Total	1,834

Of the mothers of twins, 1,220 were born in New South Wales; 166 in ictoria; 104 in the other Australasian colonies; 217 in England and ales; 62 in Scotland; 119 in Ireland; and 33 in other countries. Of e fathers, 903 were born in New South Wales; in Victoria, 134; the other Australasian colonies, 83; in England and Wales, 399; Scotland, 77; in Ireland, 134; and in other countries, 104.

The ages of the parents in the 17 cases of triplets that
during the five years, 1893–97, were as follow :—

Ages of Fathers.	Cases of Triplets.	Ages of Mothers.	Cases of Triplets.
28 years	1	22 years	1
29 ,,	1	26 ,,	1
30 ,,	1	27 ,,	1
31 ,,	1	30 ,,	1
32 ,,	2	31 ,,	1
33 ,,	1	32 ,,	2
34 ,,	2	33 ,,	2
36 ,,	1	35 ,,	3
39 ,,	2	36 ,,	1
41 ,,	1	39 ,,	2
42 ,,	1	40 ,,	2
43 ,,	1		
45 ,,	1		
50 ,,	1		
Total	17	Total	17

Of the fathers, 11 were born in New South Wales, 3 in Engl
in Scotland, 1 in Ireland, and one at sea ; while of the mothers, 13
born in New South Wales, 2 in England, and 2 in Ireland.

In the case of the quartette which occurred in 1893, the ages of
parents were 21, and both were born in New South Wales ; i
case of the 1895 quartette the father, aged 38, was born in New
Wales, and the mother, aged 36, was born in Ireland ; and in the
of the 1897 quartette the parents were born in Scotland, the
being 35, and the mother 33 years of age.

There were, during the five years, 1893 to 1897, 255 cases of
at first birth. The period elapsing between the date of marriag
the birth of the children is shown in the following table :

Period.	Number of Confinements	Period.	Number of Confinements	Period.	Num Con
1 month	6	12 months	14	23 months	
2 months	3	13 ,,	9	2 years	1
3 ,,	10	14 ,,	6	3 ,,	
4 ,,	11	15 ,,	6	4 ,,	
5 ,,	17	16 ,,	4	5 ,,	
6 ,,	12	17 ,,	3	7 ,,	
7 ,,	21	18 ,,	3	11 ,,	
8 ,,	24	19 ,,	3		
9 ,,	31	20 ,,	1		
10 ,,	17	21 ,,	3		
11 ,,	17	22 ,,	3	Total	[illegible]

2 cases of triplets which occurred at first birth during the 1893–97, 1 took place 9 months, and the other 16 months iage. None of the 3 quartettes occurred at a first birth.

DEATHS IN CHILD-BIRTH.

one year with another, the deaths resulting from various nd casualties incident to child-birth average about 6·96 per births, or one death to every 144 births. During the five d 1897 the deaths from various assigned causes were:—

ses of Death.	1893.	1894.	1895.	1896.	1897.	Total, 5 years.
… ……… …………	5	12	11	11	26	65
………………………	19	21	26	27	32	125
ever ………………	67	110	111	81	113	482
lania ………………	3	4	1	5	3	16
onvulsions …… …	22	28	23	27	32	132
evia, Flooding… ……	36	30	40	36	39	181
dolens ………… …	3	1	2	1	4	11
lties of child-birth …	66	61	64	61	72	324
Total ……………	221	267	278	249	321	1,336

e seen that nearly one-fourth of the total number of deaths attributed to child-birth. These would have been classified r proper headings had fuller information been available. Of cases which occurred during the four years 1894–97, the ere born alive in 617 cases, and still-born in 498 cases.

the five years 1893 97, 1,205 of the 1,336 women who yielded re married, and 131 single; and as there were during this ,582 legitimate and 12,282 illegitimate births—reckoning cases nd triplets as single births—it follows that amongst married fatal cases average 6·78, and amongst single women 10·66 per births. The law does not require a record of the illegitimate a deceased woman, so that it is impossible to say how many nen died in first continement during the five years under Deducting the total number of deaths of single women in during the five years—131—from the total number of deaths finement, there would remain 278 deaths of married women finement during the period, averaging 8·13 per thousand such total number of first confinements of married women in the he five years having been 34,191.

owing table shows the deaths in child-birth during the five 3–97 arranged according to the previous issue of the deceased mothers, exclusive of children still-born, no information with respe these being shown in the death registers :—

Previous Issue, Number of Children.	Number of Deaths.	Previous Issue, Number of Children.	Number of Deaths.
Illegitimate, 0........	131	Legitimate, 8........	65
Legitimate, 0........	278	„ 9........	39
„ 1........	138	„ 10........	26
„ 2........	139	„ 11........	28
„ 3........	104	„ 12........	10
„ 4........	117	„ 13........	2
„ 5........	93	„ 14........	1
„ 6........	88	„ 15........	1
„ 7........	75	„ 17........	1

The ages of all women who yielded up life in giving birth to chi during the five years 1893–97 are set forth below. It will be see the proportion of fatal cases was smallest at the twenty-fifth year, which it rapidly rose until at the age period of 40–45 years i practically the same as the mortality amongst young mothers 18 years of age. The experience of five years, however, is l sufficient to afford absolutely reliable results :—

Ages of Mothers.	Total Number of Mothers.	Deaths in Childbirth.	Deaths to every thous Confinements.
Under 18 years	2,257	28	12·41
18 years	2,835	20	7·05
19 „	4,475	35	7·82
20 „	5,696	27	4·74
21 „	7,624	43	5·64
22 „	9,037	54	5·98
23 „	10,117	57	5·63
24 „	10,546	55	5·21
25 „	10,630	48	4·51
26 „	11,047	52	4·70
27 „	10,616	58	5·46
28 „	10,816	77	7·11
29 „	9,830	55	5·59
30 „ and under 35	43,060	315	7·32
35 „ „ 40	29,307	269	9·18
40 „ „ 45	10,746	125	11·63
45 „ and upwards	1,175	18	15·32
Not stated	50	....	....
Total..................	189,864	1,336	7·04

DEATHS.

ring the ten years ended 1897, deaths in New South Wales have ged annually 13·72 per thousand males, and 11·49 per thousand es, or 12·69 per thousand of the population of the colony. ared with the death-rates of other countries, especially those of the Vorld, this rate is remarkably low; but, at the same time, it is r than might be anticipated from the peculiarly healthy climatic tions which pertain to New South Wales.

e number of deaths registered during 1897 in each of the seven ies of Australasia, and the death-rate per 1,000 inhabitants, were low :—

Colony.	Number of deaths.	Death-rate.
New South Wales	14,264	10·88
Victoria	15,126	12·87
Queensland	5,423	11·33
South Australia	4,044	11·18
Western Australia	2,643	17·63
Tasmania	1,947	11·53
New Zealand	6,595	9·14
Australasia	50,042	11·46

will be seen that in 1897 the death-rate of New South Wales was than the rates of all the other colonies with the exception of Zealand. If, however, the mean decennial rates be taken for the d from 1888 to 1897, it will be found that New South Wales has her rate than South Australia, as well as New Zealand. For that d the general rate for Australasia was 12·80 per thousand, ranging 9·75 per thousand in New Zealand to 16·27 in Western Australia. colonies are over the mean rate, namely, Western Australia, with 7; Victoria, with 14·54; Tasmania, with 13·27; and Queensland, 13·05; while three are lower, namely, New South Wales, with 9—the nearest approach to the general rate of Australasia; South tralia, with 11·89; and New Zealand, with 9·75 per thousand.

Information respecting the United Kingdom and foreign count
for the corresponding period are not yet available; but the favour
conditions of Australasia as compared with European countries wil
manifest from an inspection of the following rates for the period ext
ing from 1881 to 1896:—

Country.	1881-90.	1891.	1892.	1893.	1894.	1895.
United Kingdom	19·0	20·0	19·0	19·1	16·8	18·8
England and Wales	19·1	20·2	19·0	19·2	16·6	18·7
Scotland...............	19·2	20·7	18·6	19·5	17·2	19·7
Ireland	17·9	18·4	19·4	17·9	18·2	18·4
France	22·0	22·6	22·6	22·8	21·2	22·3
Spain	*31·9	...	...	...	...	...
Switzerland	20·8	20·7	19·2	20·4	20·5	19·7
Italy	27·3	26·2	26·3	25·3	25·1	25·2
Germany	25·1	23·4	24·1	24·6	22·3	22·1
Russia.....................	24·7	22·8	23·4	24·1	21·7	21·8
Austria	29·5	28·2	28·8	27·2	27·8	27·7
Hungary..................	32·4	33·1	35·0	31·1	30·4	29·6
Holland	21·0	20·7	21·0	19·2	18·5	18·6
Belgium	20·3	21·0	21·8	20·3	18·6	19·5
Denmark	18·6	20·0	19·4	18·9	17·5	16·9
Norway	16·9	17·5	17·8	16·3	16·9	15·7
Sweden	17·1	16·8	17·9	16·8	16·4	15·2

* For the ten years 1884-93.

In order that a just comparison may be made, the rates of Australasian colonies for the same period are given below:—

Colony.	1881-90.	1891.	1892.	1893.	1894.	1895.
New South Wales ...	14·66	14·24	12·20	13·24	12·26	11·79
Victoria	15·56	16·24	13·63	14·11	13·14	13·25
Queensland	17·04	12·77	12·66	13·34	12·08	11·38
South Australia	13·62	13·30	11·41	13·44	11·64	11·25
Western Australia ...	16·59	16·62	16·46	15·27	14·69	17·50
Tasmania	15·61	15·00	13·53	13·47	12·42	[illegible]
New Zealand............	10·37	10·35	10·06	10·23	10·19	9·91
Australasia...	14.78	14·04	12·36	13·06	12·14	[illegible]

There are many causes operating to increase the European
have not yet affected the colonies. Chief amongst these are
of small-pox and cholera. It is not surprising, therefore, that
every country of Europe should have a higher annual
any part of Australasia. Considering the favourable
of the population of New South Wales, the matter for
that the difference is so great, but that it is not greater

natic conditions, which are most favourable here, the social condition the great body of the people is far superior to that of Europeans, and ir occupations are more healthful; and were it not for the pitiable s of infant life, the death-rate of this colony would not reach much re than half the European average.

As already stated, the death-rate of males in New South Wales eraged 13·72 per thousand during the last ten years, or more than -sixth higher than that of females. The number of deaths of each of sexes, with the rate per thousand from 1888 to 1897, is given low:—

Year.	Number of Deaths.			Death-rate per 1,000 of population.		
	Males.	Females.	Total.	Males.	Females.	Total.
1888	8,453	5,955	14,408	14·94	12·67	13·91
1889	8,674	6,122	14,796	14·93	12·61	13·87
1890	8,282	5,936	14,218	13·82	11·81	12·90
1891	9,558	6,728	16,286	15·41	12·86	14·24
1892	8,544	5,866	14,410	13·38	10·81	12·20
1893	9,289	6,733	16,022	14·23	12·07	13·24
1894	8,714	6,456	15,170	13·08	11·30	12·26
1895	8,671	6,243	14,914	12·77	10·66	11·79
1896	9,256	6,583	15,839	13·41	11·02	12·30
1897	8,314	5,950	14,264	11·84	9·78	10·88
Mean for 10 years				13·72	11·49	12·69

The principal cause of the greater mortality amongst males is found the nature of their occupations, with the accidents and exposure tendant thereon. This is especially marked in the country districts the colony, where deaths from accident are extremely numerous, pecially among males. Besides this, the greater delicateness of male fants tends to increase their death-rate as compared with that of males. During the ten years 1888–97 the natural increment to the pulation by births was in the proportion of 105·10 males to 100 males; but, from the causes alluded to, the net increase of population excess of births over deaths is largely in favour of females. For the riod mentioned the excess of births over deaths averaged annually r males 11,037, and for females 12,540, the net increase being therere in the proportion of 1,000 males to 1,136 females.

The excess of males in the community, with the consequent larger umber of male deaths, makes the comparison appear more favourable o female lives than is actually the case. The following table has been computed on the assumption that the males and females in the community are equal in number, as they soon would be if it were not for he excess of males yearly added to the population by immigration. It would appear, however, from the table, that the extra males born does not counterbalance the extra number of

Year.	Male deaths.	Female deaths.	Computed male deaths, if male and female population were equal.	Excess of computed male over female deaths.
1888	8,453	5,955	7,021	1,066
1889	8,674	6,122	7,245	1,123
1890	8,282	5,936	6,943	1,007
1891	9,558	6,728	8,064	1,336
1892	8,544	5,866	7,261	1,395
1893	9,289	6,733	7,937	1,204
1894	8,714	6,456	7,477	1,021
1895	8,671	6,243	7,478	1,235
1896	9,256	6,583	8,014	1,431
1897	8,314	5,950	7,758	1,808
	Total for ten years			12,626

As a general rule, the season of the year in which numerous is the quarter ending March; but the number December quarter is nearly as great, and in some years of the first quarter. The deaths in 1891, chiefly owing epidemic influenza, were much more numerous than compared with the population, they presented a lower year since 1861. In 1895 and 1897, however, the de still lower figure, namely to 11·79 and 10·88 per thous Taking the ten years ended 1897, the deaths during ea year were :—

Year.	Quarter ending—		
	31 March.	30 June.	30 September.
1888	3,624	3,595	3,387
1889	4,101	3,728	3,158
1890	3,652	3,448	3,516
1891	3,758	3,535	3,601
1892	3,982	3,476	3,222
1893	3,710	3,616	3,859
1894	3,864	3,579	4,037
1895	3,478	3,536	3,781
1896	4,894	3,642	3,619
1897	3,299	3,657	3,291

For the purpose of comparison, the obvious divisions and country districts suggest themselves, and the annu

usand in each of these divisions of the colony for the years 1888–97 given in the subjoined table :—

Year.	Metropolis.	Country Districts.	New South Wales.
1888	18·76	11·61	13·91
1889	18·03	11·83	13·87
1890	15·10	11·79	12·90
1891	16·48	13·09	14·24
1892	13·59	11·47	12·20
1893	15·57	12·01	13·24
1894	13·94	11·39	12·26
1895	13·18	11·11	11·79
1896	13·66	11·67	12·30
1897	12·61	10·09	10·88
Mean.........	15·31	11·44	12·69

During the ten years the death-rate for the whole colony varied tween 10·88 and 14·24—a range of 3·36 per thousand. In the etropolis, however, as will be seen below, the rate varied between 12·61 d 18·76, the range being 6·15 per thousand. In the country districts 09 was the lowest rate, and 13·09 the highest, 3·00 being the ge :—

Districts.	Per 1,000 of population. Maximum.	 Minimum.	 Mean.
Metropolis (Sydney and suburbs)...	18·76	12·61	15·31
Country districts	13·09	10·09	11·44
New South Wales	14·24	10·88	12·69

Taking the deaths of persons over 5 years of age during the last ten rs, it will be found the rates for the metropolitan district and the ntry are not only more favourable, but more equal than those for all sons :—

Districts.	Per 1,000 of population. Maximum.	 Minimum.	 Mean.
Metropolis (Sydney and suburbs)...	11·38	8·86	9·98
Country districts	9·61	7·95	8·41
New South Wales	10·00	8·33	8·92

urning to deaths of children under 5 years, the chief factor of the ssive death-rate of the city and suburbs will be found :—

Districts.	Per 1,000 of mean population. Maximum.	 Minimum.	 Mean.
Metropolis (Sydney and suburbs)...	61·74	32·57	46·35
Country districts	33·21	22·54	29·10
New South Wales........................	41·68	25·71	34·69

The lesson conveyed by the above table is a very striking one minimum death-rate of infants in the metropolis was only 0·6 thousand below the maximum rate of the country, and the mean r the country was little more than three-fifths of the metropolitan. the circumstances of life in the country districts are considere distance sick persons are removed from the comforts, and eve necessaries which sickness demands, the full meaning of the low both for adults and for children, will best be understood. No potent argument could be advanced as to the natural salubrity colony than the statement of the death-rates as recorded outsi walls of the metropolis.

All satisfaction, however, in regard to the low death-rate is co to the country districts. So far as Sydney and its suburbs are conc there is no cause for congratulation; on the contrary, the rate at children of tender years drop into the grave forms a pathetic comm on the civilisation of the colony. Taking the whole period em in the table, the death-rate of children under 5 years was 5 thousand in the metropolis. The following quinquennial table ha compiled in order to illustrate the gradual change which has taken since 1871:—

Quinquennial period.	Metropolis.	Country Districts.	New South Wales.
	All ages.		
1871-75	20·91	12·77	14·[illegible]
1876-80	21·46	13·96	16·10
1881-85	20·77	13·46	15·70
1886-90	17·94	11·82	13·80
1891-95	14·53	11·79	12·72
1896-97	13·16	10·86	11·59
	Over 5 years.		
1871-75	12·72	9·25	10·21
1876-80	12·82	9·86	10·73
1881-85	12·56	9·59	11·40
1886-90	10·92	8·49	9·27
1891-95	9·50	8·63	8·92
1896-97	9·41	8·33	8·66
	Under 5 years.		
1871-75	66·28	30·55	39·78
1876-80	77·45	35·80	46·36
1881-85	73·35	35·99	46·63
1886-90	58·12	31·68	[illegible]
1891-95	45·32	29·78	34·[illegible]
1896-97	34·98	25·54	[illegible]

narkable improvement may be noticed in the death-rate of the lis, both for ages over and under 5 years. In the country the owed an increase during the second quinquennial period, arly amongst infant lives. The third period is marked by a ecovery, but this is quite eclipsed by the striking decline in the te of 1886–90. In the quinquennial period 1891–95 the rate for the country districts showed a further slight decline; was due to the proportionately smaller number of deaths children under 5 years, the death-rate of persons over that age ightly higher than in the previous quinquennium. A further the death-rates was witnessed in the last period of two years the decline being general in all divisions of the table.

following table shows the mortality in the metropolitan and districts during ten years; the figures for previous years will be earlier editions of this book. In the first part of the table will l the actual number of deaths, and in the second the proportion s of children under 5 years and of persons over that age, as d with the population:—

	Children under 5 years.			Persons over 5 years.		
	Metropolis.	Country.	N.S.W.	Metropolis.	Country.	N.S.W.
	NUMBER OF DEATHS.					
	3,035	3,172	6,207	3,223	4,978	8,201
	3,239	3,284	6,523	3,099	5,174	8,273
	2,498	3,278	5,776	3,093	5,349	8,442
	2,821	3,689	6,510	3,599	6,177	9,776
	2,446	3,381	5,827	3,066	5,517	8,583
	3,157	3,915	7,072	3,327	5,623	8,950
	2,448	3,465	5,913	3,440	5,817	9,257
	2,238	3,310	5,548	3,247	6,119	9,366
	2,234	3,691	5,925	3,355	6,559	9,914
	1,977	2,963	4,940	3,243	6,081	9,324
	PER 1,000 OF POPULATION.					
	60·19	31·33	40·92	11·38	8·28	9·28
	61·74	31·56	41·68	10·36	8·47	9·09
	45·85	30·83	35·92	9·79	8·55	8·97
	50·89	33·21	39·10	10·77	9·61	10·00
	41·20	29·74	33·69	8·86	8·33	8·51
	52·58	33·07	39·64	9·34	8·32	8·67
	40·74	28·31	32·40	9·50	8·40	8·77
	37·30	26·23	29·80	9·12	8·47	8·68
	37·85	28·26	31·24	9·58	8·77	9·03
	32·57	22·54	25·71	9·18	7·95	8·33
......	46·35	29·10	34·69	9·98	8·41	8·92

The next table gives the number of children under 1 year dyi the metropolis and country, and the proportion per thousand bi This latter approximately represents the proportion of children died within a year after birth :—

Year.	Metropolis.		Country Districts.		New South Wal	
	Deaths under 1.	Per 1,000 births.	Deaths under 1.	Per 1,000 births.	Deaths under 1.	Per births
1888	2,084	152·0	2,187	88·1	4,271	110
1889	2,301	172·4	2,371	99·0	4,672	125
1890	1,823	155·4	2,249	88·4	4,072	104
1891	2,075	148·1	2,616	102·8	4,691	118
1892	1,832	[illegible]	413	92·9	4,245	106
1893	2,048	[illegible]	592	98·2	4,640	115
1894	1,765	[illegible]	483	97·0	4,248	109
1895	1,669	[illegible]	437	93·7	4,106	105
1896	1,710	[illegible]	725	112·6	4,435	121
1897	1,551	129·1	250	89·2	3,801	102
Mean......	....	141·9	....	96·0	....	111

A more precise classification of the ages of the 3,801 children un year, who died in 1897, is appended :—

Ages.	Metropolis.	Country.	New South Wales.
Under 1 month	443	830	1,273
1 month.....	158	187	345
2 months	122	199	321
3 "	153	150	303
4 "	147	169	316
5 "	85	168	253
6 "	110	147	257
7 "	79	114	193
8 "	71	75	146
9 "	69	82	151
10 "	63	68	131
11 "	51	61	112
Total...............	1,551	2,250	3,801

The experience of the United Kingdom shows that infant mort always higher in large towns than in rural districts ; and the exp of this colony is somewhat similar. But though the condition in England are more favourable in rural districts than in the to same is not necessarily the case here. In sparsely scattered com such as the country districts of New South Wales mainly co is frequently impossible to obtain for children of tende which in towns are considered, and rightly so, almo life. Were it not, therefore, for the contagions which rns, the death-rate of children might naturally be expected to be, as this colony is concerned, higher in the country than in the city. such is not the case is evident from the foregoing table. But ared with the rates of infant mortality in the other colonies, those ew South Wales, if the division into urban and rural population ch colony be taken into consideration, seem fairly satisfactory, as be seen on reference to the following table, which gives the mean al rates calculated for the period of ten years ended 1897 :—

Colony.	Deaths of children under 1 year per 1,000 births.
New South Wales	111·8
Victoria	117·2
Queensland	107·0
South Australia	98·8
Western Australia	140·5
Tasmania	95·6
New Zealand	81·5

mpared with the rates obtaining in most European countries, for the Australasian colonies appear very favourable, as the ined table shows :—

Country.	Deaths of children under 1 year per 1,000 births.	Country.	Deaths of children under 1 year per 1,000 births.
nd and Wales	146·4	Saxony	282·8
nd	122·3	Austria	247·3
d	96·4	Hungary	255·5
e	168·3	Holland	174·5
erland	159·3	Belgium	162·9
	190·4	Denmark	136·1
ia	207·5	Norway	96·3
ia	279·0	Sweden	107·1

e general salubrity of the colony may be taken as well established, if the deaths in Sydney and suburbs, especially amongst young ren, were not relatively more numerous than those in the rest of colony, New South Wales would have no need to fear comparison any country.

e comparatively high death-rates of Sydney certainly do not arise natural causes. Seated on the hilly shores of Port Jackson, its tion is all that could be desired, and the configuration of the ground hich it stands is especially adapted to the requirements of a perfect age system. What Nature with lavish hand had bestowed, was, ever, until recently, in danger of being destroyed or polluted; for ing through the causes of death the conclusion is inevitable that no small part of the mortality of Sydney and its suburbs arose, p or indirectly, from diseases which sanitary precautions mig averted.

Amongst the Australasian capital cities, Wellington stands fi the lowest death-rate; and, over a period of years, there is not difference between the rates of the chief cities on the conti Australia, leaving Perth out of consideration. The rates for year, however, do not present equal uniformity, as will be seen following figures for 1897:—Perth, 20·06; Hobart, 16·44; Me 15·02; Adelaide, 14·87; Sydney, 12·73; Brisbane, 11·8 Wellington, 11·25. Of course the suburbs of the various c included in these calculations. Compared with cities in other the world, the result is generally favourable to Australasi following table shows the mean death-rate of the chief Aust European, and American cities for a period of years:—

Australasia.

	Annual Death-rate.		Annual Death-rate.		
Hobart	20·99	Brisbane	16·67	Sydney	
Perth	20·66	Adelaide	15·41	Wellington	
Melbourne	17·77				

United Kingdom.

Dublin	27·10	Plymouth	22·30	Birmingham	
Liverpool	26·70	Newcastle	21·80	Portsmouth	
Cork	26·10	Sheffield	21·60	Bristol	
Manchester	25·50	London	21·10	Brighton	
Glasgow	25·30	Edinburgh	20·20		

Continental Europe.

St. Petersburg	51·40	Paris	28·60	Amsterdam	
Madrid	37·40	Berlin	27·60	Rotterdam	
Budapest	35·20	Rome	26·80	Venice	
Munich	32·80	Cologne	26·20	The Hague	
Breslau	32·50	Leipzig	26·10	Copenhagen	
Prague	32·30	Stockholm	24·70	Geneva	
Milan	30·60	Hamburg	24·50	Christiania	
Vienna	29·00	Brussels	23·90		

America.

Montreal	37·20	New Orleans	22·70	Philadelphia	
New York	26·20	Toronto	21·50	St. Louis	
Brooklyn	25·60	Baltimore	21·10	San Francisco	
Boston	23·50				

This list is fairly representative, and largely as the rate for is swollen by the deaths of children of tender years, whose lives needlessly sacrificed, the comparison is satisfactory.

le following table shows the numbers of deaths at all ages during rear 1897 :—

Age Groups.	Males.	Females.	Total.
Under 3 months	1,099	840	1,939
3 months and under 6 ...	463	410	873
6 ,, ,, 12 ..	519	470	989
1 year	364	288	652
2 years	111	83	194
3 ,, ...	95	74	169
4 ,, ...	55	69	124
5 years and under 10......	195	159	354
10 ,, ,, 15... ..	143	117	260
15 ,, ,, 20......	177	173	350
20 years	47	40	87
21 years and under 25......	201	196	397
25 ,, ,, 30......	302	285	587
30 ,, ,, 35......	322	272	594
35 ,, ,, 40.....	400	304	704
40 ,, ,, 45......	393	242	635
45 ,, ,, 50......	358	191	549
50 ,, ,, 55......	401	195	596
55 ,, ,, 60......	441	208	649
60 ,, ,, 65......	511	292	803
65 ,, ,, 70......	504	280	784
70 ,, ,, 75......	406	226	632
75 ,, ,, 80......	361	252	613
80 ,, ,, 85......	243	160	403
85 ,, ,, 90	137	94	231
90 ,, ,, 95......	39	19	58
95 ,, ,, 100......	10	8	18
100 years and upwards......	6	2	8
Not stated (adults)	11	1	12
Total............	8,314	5,950	14,264

ie number of persons of the age of 70 years and upwards who died ng the year was 1,963, and of these 1,202 were males and 761 females re were 1,245 between the ages of 70 and 80 years ; 634 between und 90 years; 76 between 90 and 100 years ; and 8 centenarians male, aged 100, died at Wagga ; another, aged 101, at Bathurst others, aged 102, at Albury and Bombala respectively ; another l 104, at Coonabarabran ; and one, aged 107, at Cowra. One ale, aged 101, died at Granville, and another, aged 105, at Muswell-ok. The birthplace of the first two and the last male was England, that of the third and fourth, Ireland, while the birthplace of the h was unknown. Of the two female centenarians, the first was born England, and the second in Ireland.

The next table gives the average age at death of all persons in the colony during the last ten years, together with the averag of those who were over 5 years of age :—

Year.	Males.		Females.	
	All Ages.	Over 5 years.	All Ages.	Over 5 years.
1888	29·44	48·11	23·42	44·01
1889	29·32	48·33	23·07	44·83
1890	30·08	47·62	25·48	45·52
1891	31·50	49·58	27·08	45·90
1892	30·26	48·03	24·69	43·89
1893	28·62	49·01	23·98	45·10
1894	32·76	51·03	28·56	48·76
1895	33·49	50·55	28·02	46·91
1896	33·34	50·30	27·88	47·19
1897	34·79	51·17	30·24	47·88
Mean of 10 years...	31·36	49·37	26·24	46·00

The birthplaces of the 76,209 persons who died in New South during the five years 1893–97, are shown in the following table:—

Birthplaces.	Males.	Females.	Total.	Birthplaces.	Males.	Females.
Australasian Colonies—				European Countries and Dependencies—		
New South Wales....	23,381	20,832	44,213	German Empire .. .	693	248
Victoria	950	688	1,638	France..............	152	24
Queensland	218	195	413	Austria-Hungary	42	4
South Australia	384	305	689	Russia	66	11
Western Australia ..	11	7	18	Italy...............	86	5
Tasmania	201	135	336	Sweden and Norway..	242	7
New Zealand	142	127	269	Other Countries	297	26
Total	25,287	22,289	47,576	Total	1,578	345
United Kingdom—				Other Foreign Countries		
England	8,561	4,313	12,894	China	673	2
Wales	319	118	437	Other Asiatic Countries	14	..
Scotland	2,235	1,062	3,297	African Countries....	5	..
Ireland	4,459	3,550	8,009	United States........	228	[illegible]
Total	15,594	9,043	24,637	South American Countries	16	[illegible]
Other British Possessions				Polynesia............	43	[illegible]
India	110	48	158	Total	979	[illegible]
African Possessions..	34	17	51			
North American Possessions	90	14	104			
West Indies	48	14	62	Born at Sea	88	[illegible]
Other Possessions....	55	15	70	Birthplace not stated ..	[illegible]	
Total	337	108	445	Total	[illegible]	

Of these 76,209 persons, 47,576 were natives of Australasia, and it will be seen that in 472 cases the birthplace of the deceased was not stated. Of the remaining 28,161 persons, information was supplied respecting the length of residence in Australasia of 26,868, and from the particulars given, the following table has been compiled:—

Length of Residence in Australasian Colonies.	Males.			Females.			Total Males and Females.
	Under 21 years.	Adults.	Total.	Under 21 years.	Adults.	Total.	
Under 1 year	40	231	271	22	44	66	337
1 year and under 5......	44	502	546	27	182	209	755
5 years and under 10	43	1,010	1,053	59	508	567	1,620
10 ,, ,, 15......	51	1,611	1,662	52	749	801	2,463
15 ,, ,, 20......	20	1,298	1,318	15	579	594	1,912
20 years and upwards	...	12,625	12,625	...	7,156	7,156	19,781
Total	198	17,277	17,475	175	9,218	9,393	26,868

Amongst the persons whose term of residence is set down as 20 years and upwards, are included a native of England who had resided in the Australasian colonies for 90 years; one native of England who had arrived in the colonies 84 years ago; five natives of England who had been living in the colonies for 80 years; a native of Wales who had been living in the colonies for 85 years; a native of Scotland who had arrived 84 years ago; and seven natives of Ireland, of whom one had lived in the colonies for 88 years, one for 84 years, two for 83 years, and three for 80 years. Of the 2,958 persons born in foreign countries who died in New South Wales during the five years 1893-97, twenty had lived in the colonies for more than 60 years.

The average number of children born to each married couple has been given on a previous page of this chapter. A further tabulation has been made with the object of showing the average number of children who survive their parents in families of various sizes. It will be seen from the subjoined table that in every group the number of children surviving their fathers appears larger than the number surviving

Acts 19 Vic. Nos. 30 and 34, for the celebration of ma
The Church of England in the colony is governed by
the Archbishop of Sydney, who is Primate of Austral
and five other Bishops, whose sees are Bathurst, Goul
Grafton and Armidale, and Riverina. By an Act pas
vision was made for the creation of corporate bodies of t
property belonging to the Church of England may be v
for various dioceses have been formed under the Act. T
to hold, on behalf of the Church, all real and personal
may be assigned to them by grant, will, or otherwise.

The Roman Catholic Church is presided over by the
bishop of Sydney, assisted by a Coadjutor Bishop, unde
suffragan bishops of Bathurst, Goulburn, Grafton, Mait
and Wilcannia, the whole colony forming an ecclesi
No fewer than twenty-eight religious orders are represent
In 1897 there were 311 priests licensed to celebrate
number of Roman Catholic Churches properly so called
these, there were 775 buildings or dwellings used for
The accommodation afforded by the churches amounted
sittings, with standing accommodation for 30,940 pers
and the attendance of habitual adherents was 133,337.
by the Church authorities gives the number of religious
and the number of nuns as 1,646.

The various branches of the Presbyterian Church in
during 1897, 324 churches used for public worship;
345 public buildings or dwellings occasionally used
purpose. The number of ministers licensed to celebrat
168, of whom 157 were connected with the Presbyte
New South Wales, 6 with the Presbyterian Church, Sy
Australia; 3 with the Presbyterian Church of Eas
reconstituted Synod; 1 with the Presbyterian Chu
Australia unattached, and 1 with the Presbyterian
nected. The accommodation provided in churches was
and the attendance of habitual adherents numbered abo
Presbyterian Church of New South Wales had 11,003
and administered 2,170 baptisms during the year.
poses of this Church, the colony is divided into fourte
each comprising a number of separate charges, to ea
Minister is appointed. The management of the affairs
is controlled by a General Assembly, which sits annuall
of Ministers and Elders from the Charges within the di
teries. It is presided over by a Moderator, who is e
Presbyteries, who also nominate representatives to the Fed
The first Assembly of the Presbyterian Church of New
was held in 1865. By Act of Parliament the Assembly
grant permission to trustees to mortgage Church property,
are authorised to hold property for the Church generally.

e number of deaths in New South Wales from each cause during ear 1897 is here given, together with the proportion which each bears to the total:—

Causes of Death.	Under 5 Years.		5 Years and Over.		Total.	Proportion per cent.
	Male.	Female.	Male.	Female.		
Specific febrile or zymotic diseases	427	361	464	440	1,692	11·86
Parasitic diseases	9	6	31	20	66	0·46
Dietetic diseases	19	18	95	23	155	1·09
Constitutional diseases	142	120	1,126	823	2,211	15·50
Developmental diseases	357	283	528	319	1,487	10·43
Local diseases	1,271	1,021	2,573	1,893	6,758	47·38
Violence	116	98	764	188	1,166	8·17
Ill-defined and not specified causes	365	327	27	10	729	5·11
All causes	2,706	2,234	5,608	3,716	14,264	100·00

Class I.—Specific Febrile or Zymotic Diseases.

ler 1. *Miasmatic Diseases.*—Chicken-pox, 1; measles, 3; scarlet fever, 79; nza, 196; whooping-cough, 13; mumps, 1; diphtheria, 124; simple cond fever, 8; typhoid, enteric fever, 327.

ler 2. *Diarrhœal Diseases.*—Cholera, cholera infantum, 69; diarrhœa, 547; tery, 63.

ler 3. *Malarial Diseases.*—Intermittent fever, ague, 7; beri beri, 2.

ler 4. *Zoogenous Diseases.*—Splenic fever, 3.

ler 5. *Venereal Diseases.*—Syphilis (including congenital), 48; stricture of ra, 6.

ler 6. *Septic Diseases.*—Phagedæna, 1; erysipelas, 37; pyæmia, septicæmia, uerperal fever, 113.

Class II.—Parasitic Diseases.

rush, 15; hydatid disease, 48; worms, 1; scabies, 2.

Class III.—Dietetic Diseases.

rvation, privation, 21; want of breast milk, 34; scurvy, 2; intemperance—hronic alcoholism, 70; (*b*) delirium tremens, 24; (*c*) opium smoking, 4.

Class IV.—Constitutional Diseases.

umatic fever, rheumatism of heart, 76; rheumatism, 40; gout, 23; rickets, ncer, 686; tabes mesenterica, 126; tubercular meningitis (acute hydrolus), 166; phthisis, 964; other forms of tuberculosis, scrofula, 58; na, hæmorrhagic diathesis, 21; anæmia, chlorosis, leucocythæmia, 49; tes mellitus, 50; leprosy, 3.

Class V.—Developmental Diseases.

emature birth, 507; atelectasis, 40; cyanosis, 43; spina bifida, 16; impere anus, 10; cleft palate, harelip, 6; other congenital defects, 21; old age, 844.

Class VI.—Local Diseases.

der 1. *Diseases of the Nervous System.*—Inflammation of the brain or its branes, 206; apoplexy, 296; softening of the brain, 49; hemiplegia, brain paralysis, 149; paralysis agitans, 35; insanity, general paralysis of the ins chorea, 7; epilepsy, 113; convulsions, 440; laryngismus stridulus, 4; idi tetanus, 14; paraplegia, disease of the spinal cord, 77; congestion of br others, and brain diseases (undefined), 48.

Order 2. *Diseases of the Organs of Special Sense.*—Otitis, otorrhœa, of the ear, 11; epistaxis, disease of the nose, 1; ophthalmia, diseas eye, 6.

Order 3. *Diseases of the Circulatory System.*—Endocarditis, valvular 319; pericarditis, 77; hypertrophy of heart, 4; angina pectoris, 33; synco aneurism, 51; senile gangrene, 21; embolism, thrombosis, 26; phleb varicose veins, 3; heart disease (undefined), 362.

Order 4. *Diseases of the Respiratory System.*—Laryngitis, 39; cro other diseases of larynx and trachea, 25; asthma, emphysema, 69; bro 466; pneumonia, 730; congestion of the lungs, 70; pleurisy, 129; oth lung disease (undefined), 27.

Order 5. *Diseases of the Digestive System.*—Stomatitis, 13; dentiti sore throat, quinsy, 9; dyspepsia, 32; hæmatemesis, 5; melæna, 7; di the stomach, 67; enteritis, 818; ulceration of intestine, 89; ileus, ob of intestine, 71; stricture or strangulation of intestine, 11; intussuscep intestine, 32; hernia, 42; fistula, 6; peritonitis, 105; ascites, 19; gallsto cirrhosis of liver, 88; hepatitis, 32; jaundice, 52; congestion of liver, 1 diseases of liver, 44; other diseases of digestive system, 18.

Order 6. *Diseases of the Lymphatic System and Ductless Glands.*—Dis lymphatic system, 6; diseases of spleen, 4; bronchocele, 4; Addison's dis

Order 7. *Diseases of the Urinary System.*—Acute Nephritis, 106; Bright's 294; uræmia, 48; suppression of urine, 8; calculus, 13; haematuria, 6; of bladder and of prostate, 66; others, and kidney disease (undefined), 13.

Order 8. *Diseases of the Organs of Generation.*—Ovarian disease, 18; of uterus and vagina, 20; disorders of menstruation, 4; pelvic absc perineal abscess, 2; diseases of testes, penis, scrotum, 2.

Order 9. *Diseases of Parturition.*—Abortion, 26; miscarriage, 32; pu mania, 3; puerperal convulsions, 32; placenta prævia, flooding, 39; phl Dolens, 4; other casualties of childbirth, 72.

Order 10. *Diseases of the Organs of Locomotion.*—Caries, necrosis, 24; a ostitis, periostitis, 7; joint disease, 4; curvature of spine, 3.

Order 11. *Diseases of the Integumentary System.*—Carbuncle, 6; phl cellulitis, 8; lupus, 1; ulcer, bed sores, 9; eczema, 13; pemphigus, 5; der etc., 5.

Class VII.—Violence.

Order 1. *Accident or Negligence.*—Fractures and contusions, 421; wounds, 18; cuts (tetanus), 14; burns, 139; scalds, 29; sunstroke, 57; lightn poison, 19; bite of snake or insect, 10; drowning, 140; suffocation, 37; at birth, 6; cross-birth, 2; umbilical hæmorrhage, 14; blood-poisoni collapse under chloroform, 4; boiler explosion, 2; dynamite explosion, 6; f in larynx, 1; injury by bullock, 2; ptomaine poisoning, 3; eating unripe

Order 2. *Homicide.* Murder, 22; manslaughter, 14; justifiable homici

Order 3. *Suicide.* Gunshot wounds, 35; cut, stab, 20; opening ve poison, 35; drowning, 57; hanging, 24; burning, 1; jumping from a hei going in front of railway engine, 3.

Order 4. *Execution.*—Judicial Hanging, 3.

Order 5. *Violent Deaths not classed.* Found drowned, 3.

Class VIII.—Ill-defined and not Specified Causes.

Dropsy, 27; atrophy, debility, inanition, 688; tumour, 3; abscess, 1 ill-defined and not specified causes, 10.

Males, 8,314; Females, 5,950. Total, 14,264.

ɜ foregoing it will be seen that the number of deaths from the colony during 1897 was greater than that from any ɜe. The mortality from this cause was, however, lower than rate of the preceding ten years, the expected number of g 1,170, as against an actual experience of 964. The fatal ncer were, on the contrary, 686, as against an expectation d on the experience of the preceding decade, but the rate in ı Wales during the period 1888–97 was only 0·429 per f population, as compared with 0·691 in England and Wales period 1887–96.

ıwing are the principal causes of death, arranged in order —

	Number of deaths.
	964
	935
	844
	818
	730
lebility, inanition	688
	686
ıse (exclusive of is, pericarditis, and	598
	547
rth	507
	466
	446
and pericarditis	396
eric fever	327
d puerperal fever	321
	296
ıse	294
the urinary system of Bright's disease)	260
s	245
of the brain and its ı	206
	196
	187
brain paralysis	149
ıs (atelectasis, cyano- ifida, &c.)	136
	129
erica	126
	124
	113
meningitis (acute dus)	106
	105
ı	98
intestine	89
	79

	Number of deaths.
Insanity, general paralysis of the insane	77
Paraplegia, diseases of spinal cord	77
Rheumatic fever	76
Ileus, obstruction of intestine	71
Congestion of the lungs	70
Cholera, cholera infantum	69
Asthma, emphysema	69
Diseases of stomach	67
Dysentery	63
Tuberculosis, scrofula	58
Aneurism	51
Diabetes mellitus	50
Anæmia, chlorosis, leucocythæmia	49
Softening of the brain	49
Croup	49
Syphilis (including congenital)	48
Hydatids	48
Pyæmia, septicæmia	44
Hernia	42
Rheumatism	40
Laryngitis	39
Erysipelas	37
Paralysis agitans	35
Want of breast milk	34
Congestion of brain	33
Dyspepsia	32
Intussusception of intestine	32
Dentition	31
Lung disease (undefined)	27
Dropsy	27
Caries, necrosis	24
Gout	23
Murder	22
Privation, starvation	21
Purpura, hæmorrhagic diathesis	21
Diseases of uterus and vagina	20
Ascites	19
Ovarian disease	18
Thrush	15

Below will be found a comparison of the deaths due to each cla
disease during the eight years ended 1897 :—

Causes of Death.	1890.			1891.			1892.			1893.	
	Deaths.	Percentage.	Per 1,000 living.	Deaths.	Percentage.	Per 1,000 living.	Deaths.	Percentage.	Per 1,000 living.	Deaths.	Percentage.
Specific febrile, or zymotic diseases.	2,022	14·22	1·84	2,917	17·91	2·55	2,022	14·03	1·71	2,891	18·04
Parasitic diseases..	71	0·50	0·06	55	0·34	0·05	66	0·46	0·06	87	0·54
Dietetic diseases ..	235	1·65	0·21	212	1·30	0·19	204	1·42	0·17	132	0·82
Constitutional diseases	1,988	13·98	1·80	2,141	13·15	1·87	2,064	14·32	1·75	2,143	13·38
Developmental diseases	1,322	9·30	1·20	1,489	9·14	1·30	1,347	9·35	1·14	1,449	9·04
Local diseases	6,587	46·33	5·98	7,301	44·83	6·38	6,527	45·29	5·52	7,203	44·96
Violence	1,163	8·18	1·06	1,165	7·15	1·02	1,153	8·00	0·98	1,133	7·07
Ill-defined and not specified causes..	830	5·84	0·75	1,006	6·18	0·88	1,027	7·13	0·87	984	6·14
Total	14,218	100·00	12·90	16,286	100·00	14·24	14,410	100·00	12·20	16,022	100·0

Causes of Death.	1894.			1895.			1896.			1897.	
	Deaths.	Percentage.	Per 1,000 living.	Deaths.	Percentage.	Per 1,000 living.	Deaths.	Percentage.	Per 1,000 living.	Deaths.	Percentage.
Specific febrile, or zymotic diseases.	2,622	17·28	2·12	2,228	14·94	1·76	2,286	14·43	1·78	1,692	11·86
Parasitic diseases..	74	0·49	0·06	69	0·46	0·06	73	0·46	0·06	66	0·46
Dietetic diseases ..	166	1·10	0·13	199	1·34	0·16	212	1·34	0·16	155	1·09
Constitutional diseases	2,135	14·08	1·73	2,180	14·62	1·72	2,243	14·16	1·74	2,211	15·50
Developmental diseases	1,419	9·35	1·15	1,480	9·92	1·17	1,492	9·42	1·16	1,487	10·43
Local diseases	6,841	45·10	5·53	6,896	46·24	5·45	7,323	46·24	5·69	6,758	47·38
Violence	1,094	7·20	0·88	1,128	7·56	0·89	1,367	8·63	1·06	1,166	8·17
Ill-defined and not specified causes..	819	5·40	0·66	734	4·92	0·58	843	5·32	0·65	729	5·11
Total	15,170	100·00	12·26	14,914	100·00	11·79	15,839	100·00	12·30	14,264	100·0

DEATHS FROM CANCER.

The diseases which deserve special mention, although they a
exactly the three which claim most victims in the course of the
are cancer, phthisis, and heart disease. During the year 1897
were 686 fatal cases of cancer, as compared with 621 in the pre
year, and 556 in 1895.

number of years deaths from cancer have been more numerous males than among females ; thus in 1894, there were 308 male and ale deaths ; in 1895, 311 male and 245 female deaths ; in 1896 le and 294 female deaths ; and in 1897, 365 male and 321 deaths. The ages of the 686 persons who died in 1897 ranged s than 1 to 102 years. Of the total number, 187 were born in asia ; while of the remainder, 399 had been resident in the for 20 years or more ; 40, between 15 and 20 years ; 36, between 15 years ; 16, between 5 and 10 years ; 1, for 4 years ; 3 for ; 1, for 2 years ; and 2 for less than 1 year.

ould seem that cases of cancer are increasing in New South nuch faster than might be expected from the actual increase in ion. All fatal cases have been recorded since 1856, and during rval the proportion per thousand of the population has more than For the five years, 1856–60, the proportion was 0·14 per d, while in 1893–97 it was 0·45 per thousand. Possibly the ilful diagnosis of late years, especially of internal cancer, may for part of the increase ; but when every allowance has been n this score, it will be found that the spread of cancer is a eality, demanding very serious attention. The following table he deaths since 1856, with the proportion per thousand of popu-

Deaths.	Per 1,000 of Population.	Year.	Deaths.	Per 1,000 of Population.	Year.	Deaths.	Per 1,000 of Population.
32	0·14	1870	113	0·23	1884	233	0·26
38	0·13	1871	127	0·25	1885	267	0·29
37	0·11	1872	149	0·28	1886	333	0·34
48	0·14	1873	159	0·29	1887	354	0·35
60	0·18	1874	156	0·28	1888	404	0·39
68	0·19	1875	181	0·31	1889	393	0·37
73	0·20	1876	166	0·27	1890	392	0·35
76	0·20	1877	167	0·27	1891	516	0·45
83	0·22	1878	191	0·29	1892	510	0·43
88	0·22	1879	171	0·25	1893	489	0·40
105	0·25	1880	239	0·33	1894	516	0·42
112	0·26	1881	216	0·28	1895	556	0·44
118	0·26	1882	215	0·27	1896	621	0·48
119	0·25	1883	215	0·26	1897	686	0·52

DEATHS FROM PHTHISIS.

A notable decrease in the number of deaths from phthisis and
forms of tuberculosis has taken place since the passing of the
Supervision Act of 1886, the Diseased Animals and Meat Act of
and the Public Health Act of 1896. Under these Acts, the
Health is empowered to supervise dairies and the production of
cream, butter, and cheese, and to prevent the sale of tuberculous
In the following table the deaths from phthisis and other
tuberculosis are shown for a period of ten years, together with
proportion to population :—

Year.	Deaths from—			Per 100,000 of Population.
	Phthisis.	Others forms of Tuberculosis.	Total.	
1888	1,045	95	1,140	110
1889	1,025	97	1,122	106
1890	1,029	86	1,115	101
1891	1,053	105	1,158	101
1892	1,018	112	1,130	96
1893	1,069	93	1,162	96
1894	1,042	104	1,146	93
1895	1,016	104	1,120	89
1896	1,027	69	1,096	85
1897	964	58	1,022	78

**The 964 deaths from phthisis which occurred during 1897 in
587 males and 377 females, whose ages are shown in the fol
table :—**

Age Groups.	Deaths.	Age Groups.	Deaths.	Age Groups.
Under 1 year	8	17 years	15	40 years and under
1 year	7	18 ,,	10	45 ,, ,,
3 years	1	19 ,,	14	50 ,, ,,
7 ,,	3	20 ,,	14	55 ,, ,,
10 ,,	2	21 ,,	24	60 ,, ,,
11 ,,	4	22 ,,	20	65 ,, ,,
12 ,,	1	23 ,,	21	70 ,, ,,
13 ,,	2	24 ,,	28	75 ,, ,,
14 ,,	1	25 years and under 30	140	80 ,, ,,
15 ,,	1	30 ,, ,, 35	134	
16 ,,	8	35 ,, ,, 40	130	Total

The Australian climate is certainly favourable to persons
from pulmonary diseases, and a considerable number of persons
ing from phthisis visit Australia in search of relief. Many of
are in the last stages of the disease, and succumb after a short
in the colony. It may be said that during those years for
information is available, about 6½ per cent. of the fatal cases of
sumption were those of persons whose residence in Australia ha

ve years. The figures for the year 1897 show that out of the
s who died from phthisis, 514 were natives of Australasia;
vere persons who had resided in the colonies for 20 years
ds; 68, for 15 years and under 20; 97, for 10 years and
and 50, for 5 years and under 10; while 6 persons died of
iring the fifth year of their sojourn in the colonies; 4 during
year; 13 during the third year; 7 during the second year;
ing the first year.

DEATHS FROM HEART DISEASE.

from heart disease during the year 1897 numbered 1,045,
males and 402 females. Their ages are shown below:—

ıpa.	Deaths.	Age Groups.	Deaths.	Age Groups.	Deaths.
....	19	15 years..............	4	50 years and under 55	65
....	2	16 „	6	55 „ „ 60	98
....	1	17 „	4	60 „ „ 65	119
....	2	18 „	8	65 „ „ 70	153
....	3	19 „	5	70 „ „ 75	106
....	4	20 „	2	75 „ „ 80	76
....	4	21 „	9	80 „ „ 85	30
....	4	22 „	2	85 „ „ 90	11
....	3	23 „	5	90 „ „ 95	4
....	1	24 „	3	95 „	1
....	4	25 years and under 30	35	97 „	1
....	3	30 „ „ 35	42	Not stated	2
....	2	35 „ „ 40	55		
....	9	40 „ „ 45	73	Total	1,045
....	3	45 „ „ 50	62		

nber of new arrivals among the 1,045 persons enumerated in
ing table was small. Two persons died during the first year
ce in Australasia; 2 during the second year; 2 during the
; 1 during the fourth year; and 4 during the fifth year;
had been residing in the colonies from 5 to 10 years; 44 from
ears; 52 from 15 to 20 years; and 570 persons 20 years and
Of 6 persons the length of residence was not known, and
natives of Australasia.

DISEASES OF NERVOUS SYSTEM.

A good deal is heard from time to time of the unhappy effects which our increasing civilisation has upon the health of the community, and of the large increase of diseases of the nerves and brain. The statistics of deaths show quite the contrary. Apoplexy, epilepsy, and other diseases of the nervous system do not now show so many fatal cases as formerly in proportion to the population. This will readily be seen from the following table, which covers the whole period during which registration has been in force :—

Year.	Deaths.	Per 1,000 of population.	Year.	Deaths.	Per 1,000 of population.	Year.	Deaths.	Per 1,000 of population.
1856	489	2·08	1870	947	1·93	1884	1,803	2·04
1857	792	2·67	1871	984	1·94	1885	1,940	2·09
1858	930	2·87	1872	1,145	2·17	1886	1,800	1·86
1859	868	2·56	1873	1,180	2·17	1887	1,675	1·67
1860	884	2·58	1874	1,265	2·24	1888	1,692	1·63
1861	736	2·08	1875	1,307	2·24	1889	1,671	1·57
1862	916	2·53	1876	1,293	2·14	1890	1,594	1·45
1863	866	2·33	1877	1,245	1·98	1891	1,691	1·48
1864	855	2·22	1878	1,427	2·17	1892	1,580	1·34
1865	822	2·05	1879	1,380	2·00	1893	1,836	1·32
1866	905	2·16	1880	1,499	2·06	1894	1,592	1·29
1867	1,025	2·35	1881	1,541	2·01	1895	1,557	1·23
1868	1,023	2·25	1882	1,644	2·06	1896	1,653	1·25
1869	943	2·00	1883	1,594	1·90	1897	1,554	1·19

ACCIDENTS.

Accidental deaths are very numerous, especially in the country. The number registered during 1897 was 935, or 226 in the metropolis and 709 in the country districts. The numbers for 1896 were 234 and 901 respectively. The large increase shown in 1896 over the figures for every year of the preceding decade was due to the abnormally large number of fatal cases of sunstroke and heat apoplexy which occurred

SUICIDES.

The number of suicides registered in New South Wales during each of the last ten years, classified according to the various modes adopte for the taking of life, was as follows:—

Year.	Shooting.		Cut, Stab, etc.		Poison.		Drowning.		Hanging.		Other Modes.		All cases.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
1888	29	...	18	5	26	19	7	4	16	1	6	1	102	30	132
1889	25	...	20	4	18	10	8	5	15	3	3	1	89	23	112
1890	19	1	16	2	16	12	14	5	25	2	4	2	94	24	118
1891	36	1	14	2	16	10	3	2	29	4	2	...	100	19	119
1892	37	...	17	1	20	11	8	4	20	1	6	2	108	19	127
1893	42	...	18	2	28	8	22	8	15	6	3	1	128	25	153
1894	29	2	15	3	22	14	23	16	17	5	5	...	111	40	151
1895	37	1	24	2	25	10	24	9	18	4	7	2	135	28	163
1896	39	1	18	2	26	10	39	11	26	3	7	...	155	27	182
1897	34	1	26	1	22	13	40	17	20	4	7	2	149	38	187
Total	327	7	186	24	219	117	188	81	201	33	50	11	1,171	273	1,444

Suicide by hanging formerly claimed the largest number of mal victims; but for the ten years ended 1897 there were 327 suicides o males by shooting, as against 201 by hanging. Death by poisoning was most favoured by women, there having been 117 cases during the decade, while 81 females put an end to themselves by drowning.

The following table shows the number of suicides, and the proportion to total deaths, for the last ten years:—

Year.	Suicides by males.		Suicides by females.		Total Suicides.	
	No.	Per thousand of total deaths of males.	No.	Per thousand of total deaths of females.	No.	Per thousand deaths.
1888	102	12·07	30	5·04	132	9·16
1889	89	10·24	23	3·74	112	7·55
1890	94	11·35	24	4·04	118	8·30
1891	100	10·46	19	2·82	119	7·31
1892	108	12·64	19	3·24	127	8·81
1893	128	13·78	25	3·71	153	9·55
1894	111	12·74	40	6·20	151	9·95
1895	135	15·48	28	4·49	163	10·0[illegible]
1896	155	16·75	27	4·10	182	11
1897	149	17·92	38	6·38	187	[illegible]

The following table shows the average annual proportion of suicides, different age-groups of males and females, per million of population, r the twenty-seven years 1871–97 :—

Age Groups.	Average of 10 years, 1871-80.		Average of 10 years, 1881-90.		Average of 7 years, 1891-97.		Average of 27 years, 1871-97.	
	M.	F.	M.	F.	M.	F.	M.	F.
10 years and under 15 ...	3	...	4	2	10	5	6	2
15 ,, ,, 20 ...	12	8	30	48	36	74	28	47
0 ,, ,, 25 ...	41	45	108	48	152	93	107	63
5 ,, ,, 30 ...	81	35	209	61	180	64	168	56
,, ,, 35 ...	187	68	247	72	282	86	245	76
,, ,, 40 ...	273	71	268	71	436	148	326	97
,, ,, 45 ...	224	118	326	112	482	74	348	100
,, ,, 50 ...	394	83	386	87	505	104	428	92
,, ,, 55 ...	409	86	557	149	627	81	542	109
,, ,, 60 ...	376	90	501	105	663	83	531	93
,, ,, 65 ...	505	206	472	99	705	270	560	185
,, ,, 70 ...	650	95	657	109	906	92	738	100
,, and upwards ...	349	41	521	125	1,070	240	670	152
All ages	125	33	165	42	220	57	174	45

These figures show that suicide is steadily increasing both amongst males and females, and that for males the disposition to self-destruction increases with each year of life. The rate for females is only one-fourth of that for males, and this average has been maintained in a singular manner throughout the whole period over which observation extends. At no period of life, except during the five years 15 to 19, are females more prone to suicide than males, nor does age develop the tendency amongst them to the same extent.

Experience shows that conduct is largely influenced by the seasons. As regards suicides, this is most plainly seen amongst males, who are more inclined to attempt self-destruction in the first and last quarters of the year than in the intervening period. January, February, and December, the three hottest months of the year, have the largest record of suicides. For the decade ended 1897 the proportion of male sui during the four quarters of the year was as follows :—

First quarter	24·31	per cent.
Second quarter	22·23	,,
Third quarter	23·82	,,
Fourth quarter	29·64	,,

Female suicides classified by quarters for the same period sho highest proportion during the fourth quarter, as do the males; contrary to expectation, the proportion of the first quarter is the l of the year, the figures being as follow :—

First quarter	19·41	per cent.
Second quarter	23·08	,,
Third quarter	26·37	,,
Fourth quarter	31·14	,,

The mean rate of the whole of Australasia for the ten years 1897 was 11·5, which is slightly lower than in New South Wales respect to suicide, however, all the colonies compare somewhat unf ably with Great Britain. The following figures show the rate of from suicide in the Australasian colonies :—

Colony.	Per 100,000 of mean population.
Tasmania	8·1
South Australia	9·3
New Zealand	9·3
Victoria	11·1
New South Wales	12·2
Queensland	15·7
Western Australia	20·2

In comparison with those of the majority of European countri Australasian rates show to better advantage than with those United Kingdom, as will appear from the subjoined table, which the average rates over a number of years :—

Country.	Per 100,000 Inhabitants	Country.	Per 1 Inhab
England and Wales	8	Italy	
Scotland	6	Switzerland	[illegible]
Ireland	3	Belgium	[illegible]
Germany	21	Holland	[illegible]
Prussia	20	Sweden	[illegible]
Bavaria	13	Norway	[illegible]
Saxony	32	Denmark	[illegible]
Austria	16	Spain	[illegible]
Hungary	11	Finland	[illegible]
France	23		

INDEX OF MORTALITY.

well-known that the ages of the population considerably affect th-rate of a country ; and in order to have a comparison of the ty of the principal countries of the world on a uniform age he International Statistical Institute, in its 1895 session, held at decided to recommend the adoption of the population of Sweden, age-groups, as ascertained at the census of 1890, as the standard ion by which the index of mortality should be calculated. ng the coefficient of mortality in each age-group in New South to the age-constitution of the standard population, the index of ity for the colony during the last ten years is found to be as :—

Year.	Index of Mortality.	Death-rate.
	per thousand.	per thousand.
1888	17·26	13·91
1889	17·22	13·87
1890	16·51	12·90
1891	18·68	14·24
1892	15·65	12·20
1893	16·71	13·24
1894	16·32	12·26
1895	15·69	11·79
1896	16·45	12·30
1897	14·97	10·88

purposes of comparison, the index of mortality has been cal- l for each of the seven colonies of Australasia during the five years 1897, and the figures are set down below. How greatly the age- ution of the population determines the annual mortality of a y may be seen from the table, which shows that in 1897 the index tality in Australasia ranged from 18·47 per thousand in Western lia to 13·53 per thousand in New Zealand, while for the same ie death-rate ranged from 17·63 in Western Australia to 9·14 per nd of population in New Zealand.

s necessary to point out, in connection with the calculations of lices of mortality, that the age-constitution of the population of f the colonies during each of the five years taken has been assumed that which existed at the census in 1891. It is apparent that the sition of the populations of some of the colonies has changed apprehensions, that as new laws are continually being large proportion of such laws attach the penalty of fine or to their breach, the number of offences for which a person be apprehended has constantly been increasing; and second, general tendency of late years has been for magistrates summarily with a large proportion of the cases submitted Hence it is quite possible that crime might be neither diminishing, and yet the returns show an increase of and a decrease of committals. Taking all things into the tables given hereunder may be accepted as showing that largely decreased. The first table shows, in quinquennial mean population, the average number of apprehensions, and the tion of these to the general population for the last twenty-

Period.	Mean Population.	Apprehensions.	
		Average Annual.	Per 100,000 of Population.
1870-74	526,733	19,422	3,687
1875-79	633,255	28,837	4,554
1880-84	802,712	41,262	5,140
1885-89	1,000,744	39,406	3,938
1890-94	1,174,963	37,854	3,222
1895-97	1,287,655	36,341	2,822

It cannot be claimed that 2,822 apprehensions per 100,000 lation is a low average; on the contrary, it is much above that of the other colonies of the group, but it is a marked the rates of previous years. The comparison made above has to the whole population, but as few persons under 15 commit crimes, children under that age have been following statement, which compares the four years 1879-82 four years 1889-92, these periods being selected on number in each age-group being accurately determinable Census taken about the middle of each period. The relate to males :—

Age-group.	1879-82.			1889-92.	
	Population.	Average Annual Arrests.	Per 100,000 of Population.	Population.	[illegible]
15 years and under 20...	38,169	1,734	4,543	54,267	[illegible]
20 ,, ,, 30...	75,106	8,884	11,829	117,855	[illegible]
30 ,, ,, 40...	56,699	8,141	14,358	92,495	[illegible]
40 ,, ,, 50...	43,668	5,945	13,614	58,500	[illegible]
50 ,, upwards...	44,602	5,061	11,347	68,970	[illegible]

In every age-group there has been a decided fall in the arrests, but the improvement is most marked in the higher ind is exposed to different classes of disease, some virulent rief duration, others protracted in duration yet less fatal in ts. Within a few months after their entrance into the world ity of the infants prematurely born or of weak or imperfect ion are removed by death, and others succumb to such causes laying," improper feeding — commonly termed "want of lk"—and "infanticide." During the next few years of life re especially subject to such diseases as convulsions (sympto- undeveloped causes of sickness), measles, whooping-cough, ver, and diphtheria, from which the survivors generally enjoy nity during the remainder of their life. Later on in the of years, during a period ranging from puberty to the change any become victims to consumption, often after a wearisome ring resistance; while after entering into active life they are o the risk of accidents, more or less imminent according to the n adopted, and resulting it may be in immediate death or in a ess permanent sickness or disablement; and during this period les, if not, as a rule, so exposed to external dangers, suffer loss from the risks of childbirth. During the later portion of d and the years succeeding it, many are removed by diseases e of which they may have been secretly or unwittingly suffer- ears; and the deaths from heart disease, liver diseases, and e very numerous, the last-named becoming more widespread in th Wales and more prevalent among men than among women. t of all comes that oft-time protracted "chronic illness" termed "old age," when people are for the most part unable for the means of subsistence, and are therefore dependent on sion they have made in the past or on the good will of others. i in a medical sense sickness may only be used to denote that he body which requires the administration of medicine or the e and services of a medical practitioner, yet in the ordinary on of the term it is employed to denote inability to follow one's upation in life from whatever cause it may arise. Thus a sore ight be "sickness" in the case of a compositor or a bricklayer, n the case of his foreman or employer.

ordance with the decision of the Conference of Statisticians, an was inserted in the Census schedule with the intention of information as to the number of persons suffering from sickness ity. It was not expected that the inquiry would be on all ccessful; indeed, it was recognised that the term sickness is ue; but it is probable that the inquiry was understood to refer ty to follow ordinary occupations, or, where there was no occu- en bed-fast sickness was understood. Judging from the infor- athered from other sources, it is believed that the particulars were substantially accurate, except perhaps in regard to epilepsy y. In the case of persons suffering from the neuroses last d, it is quite possible that there was some reluctance on the first time or whose history was unknown. Of these, a [illegible] probably not far short of 40 per cent., find their way [illegible] not deterred by their former experience, or driven [illegible] loss of caste which a criminal conviction inevitably [illegible] persons convicted for the second time, 52 per cent. will [illegible] to gaol for the third time, and of the thrice convicted [illegible] will be again received into gaol.

CRIME IN AUSTRALASIA.

The convictions in the higher Courts of New South Wales [illegible] a series of years, greatly exceed in number those of any other [illegible] in proportion to the population they are only exceeded by [illegible] Australia. So marked is this fact that much speculation [illegible] indulged in as to the probable cause of the anomaly. It is [illegible] that the people of all the colonies are practically derived from [illegible] stock, while their occupations and habits of life are fairly [illegible] a theory has been hazarded that the high rate of crime in New [illegible] Wales is due to a blood taint derived from the original [illegible] of this colony. Such a theory is manifestly absurd, as T[illegible] province which received proportionately the largest number of [illegible] and the population of which has been least diluted by imm[illegible] for many years had the most favourable record of convictions [illegible] no evidence that such a population now exists anywhere in Au[illegible] it certainly does not exist in New South Wales. But the [illegible] gratuitous theory above alluded to may be easily disposed [illegible] remains that the second largest proportion of convictions [illegible] courts occurs in this colony. Western Australia shows a [illegible] proportion; but its sparse population and peculiar situ[illegible] warrant the anticipation of a large amount of crime [illegible] found in the older settled provinces. The convictions [illegible] the Superior Courts of Australasia, for the year 1897, were [illegible]

Colony.	Convictions in Superior Courts	
	Number.	Per 10,000 of Population.
New South Wales	883	6.
Victoria	415	3
Queensland	188	3
South Australia	134	3
Western Australia	194	12
Tasmania	31	1
New Zealand	366	51
Australasia	2,211	.5

insane was 73—a much larger figure than their proportion of munity warranted; but in this the Chinese were not singular, as other nationalities had a like undue proportion.

irtue of the Leprosy Act of 1890, the Board of Health is red to detain and isolate persons suffering from leprosy. In ere were lepers in all the colonies of Australasia except Tas- and in all the cases then known to the health authorities the were of the male sex. The number of lepers in each colony at ne, and the nationalities to which they belonged, were as set out ppended table:—

Colony.	Nationality.							
	Europeans.	Australian Aboriginals.	Maoris.	South Sea Islanders.	Chinese.	Javanese.	Cingalese.	Total.
South Wales.	5	...	...	...	9	1	...	15
ria	1	...	...	...	2	...	...	3
nsland	2	1	...	3	3	...	1	10
a Australia...	...	...	...	...	3	...	...	3
ern Australia	...	...	...	...	1	...	...	1
Zealand	...	...	4	...	...	...	...	4
Total.........	8	1	4	3	18	1	1	36

he 1st January, 1898, there were 13 persons—11 males and 2 —in the leper lazaret at Little Bay, New South Wales. This was three less than that at the beginning of 1897, and consider- s than that at the beginning of the year 1896, nineteen Chinese aving been returned to their native country in the course of ear. The inmates at the beginning of 1898 belonged to the g nationalities:—New South Wales, 6; England, 1; Germany, ted States, 1; India, 1; Java, 1; South Sea Islands, 2. The o Chinese remaining in the lazaret at the beginning of 1897 turned to China during the course of that year.

ng the Census year there were 943 deaths due to accidents, ng of males and 163 of females. On the day of enumeration, ales and 211 females were recorded as suffering from accidents a nature as to require special attention.

The blind numbered 416 males and 325 females, of whom 657 we adults and 84 under 21 years of age. Of these, 32 adults were emplo or connected with the Industrial Blind Institution at Sydney, and children were in other public institutions.

By crippled were understood such persons as through illness o accident had lost the complete or partial use of one or more than o limb without being entirely deprived of the member itself. The ter none too happy, seeing that a majority of the persons afflicted were disabled from following gainful occupations.

The deaf and dumb comprised 162 adults, and 221 children and oth under 21 years; of these, 57 were inmates of the Deaf and Du Institution at Sydney. There were 780 males and 568 females retur as being deaf but not dumb. Deafness, as defined in the Census schedule; was intended to mean total infirmity; the inquiry, however, was possibly misunderstood by some, and cases of infirmity of hearing short of total deafness recorded, but the figures viewed in ages give no clue to what was really understood. There were 127 persons under 21 years returned as deaf, and 1,221 above that age. The persons returned as dumb but not deaf were only 9 in number, 3 of whom were males, and 6 females.

The epileptics whose infirmity was noted on the schedule were 20 males and 130 females. They probably comprised only those who were actually suffering on the day of the Census—the persons with an epileptic taint were doubtless much more numerous.

As already pointed out, there is reason to believe that the number of persons returned as idiotic understates the truth, seeing that only 118 under 21 and 168 over that age were so returned. Perhaps only the aggressively idiotic were recorded on the Census papers, for truly between the drivelling idiot and the confessedly sane there are many grades of idiocy not likely to be acknowledged as such.

Duration of Sickness.

No doubt accurate returns could be obtained from public institutions as to the duration after admission and the result of all cases which have undergone treatment in them, but they would not be correct enough for general use. Many of the cases of sickness might have existed for some time before the patient applied for relief, and, what is of still greater importance, as a rule only those whose condition is deemed critical are conveyed to a hospital, whilst what is required to make the statistics of any public utility is that we should obtain the average duration of "sickness," that is, of inability to work at the usual trade or business each period of life.

Up to the present time no statistics relating to the average dura of fatal sickness have been compiled, although in most cases val ion might be obtained from the registration of deaths. So ever, as relates to the duration of general sickness, some t material was compiled by the late Secretary to the ter Unity of the Independent Order of Oddfellows in New Vales concerning the mortality and sickness among its . From this information has been prepared the following which a comparison is made between the experience of ensive Order in England and in New South Wales with o the average sickness per annum to each person, the annual per cent., and the number of days' sickness to each death, at ge groups :—

England.			New South Wales.		
Weeks of Sickness per Member per annum.	Mortality per cent. per annum.	Days of Sickness to 1 Death.	Weeks of Sickness per Member per annum.	Mortality per cent. per annum.	Days of Sickness to 1 Death.
0·754	0·667	791	0·401	0·293	958
0·827	0·764	758	0·512	0·455	788
0·954	0·864	773	0·629	0·575	765
1·100	1·046	736	0·828	0·667	316
1·348	1·257	751	1·181	0·988	837
1·776	1·545	805	1·583	1·087	1,020
2·406	2·035	828	1·949	1·638	833
3·441	2·769	867	3·299	2·278	1,014
5·306	3·989	931	6·616	3·605	2,241
8·399	5·638	1,043	6·949	6·019	808
13·092	8·560	1,071	15·164	8·850	1,200
18·307	12·204	1,050	14·860	20·000	520

the above it will be seen that both the mortality experience olony and the sickness appear to be lower than in England; data for New South Wales in regard to sickness are not yet to enable any confident deduction to be drawn from the l results.

NEW South Wales was garrison
time of its foundation as a
part of the years 1870 and 1871 the
its defence being entirely in the hand
a local regular defence force was e
Artillery and two companies of foot.
following year; but the Artillery wa
in 1876, and a third in 1877. In
until that year had consisted of only
corps of Submarine Miners and Mou
ceased to exist in 1890; but a fourth
and in 1891 a third arm was again ra
Corps.

To supplement the Imperial troo
was enrolled in 1854, Great Britain
The Act authorising the establishme
The original strength of the corps wa
of Artillery, and six companies of fo
South Wales Rifles; but with the te
Volunteers practically ceased to exi
a second force was enrolled, cons
Rifles, three batteries of Artillery-
and one at Newcastle—and twenty
of which were recruited from Sydn
the country districts; the total s
1,700 men. The existence of the

ages assumed were those ascertained at the Census taken on the il, 1891, and the deaths those registered as occurring during the months preceding and the twelve months following the day of isus. The number of persons dealt with was 1,123,954, being ulation of the colony, less the aborigines; and the number of n the two years, 30,504. It may be well to note at this stage e death-rate of 1891 was very considerably augmented by the a epidemic, an abnormal proportion of deaths occurring amongst rsons, especially females. This is a circumstance which should n into account in comparing life-tables hereafter compiled with now presented.

necessity for exact data in calculating life contingencies brought stence the first life-table; but there are uses to which it may be ; are entirely apart from the requirements of the actuary. If gress of medicine, viewed as the art of prolonging life, is to sured, the only gauge which can be applied is the life-table; s held to be very positive evidence of the improved condition people that in the forty years that elapsed between the compi- f Dr. Farr's first table of the expectation of life and of that by e, there was an improvement of 1½ years in the expectation at

impossible to compare the expectation of life now ascer- for New South Wales with that of past years, as this is the ne that the expectation has been ascertained; but a few com- s with Dr. Ogle's table for England may not be without . First, however, it may be well to allude to several material which should be kept in view in dealing with the New South able.

population of the colony is composed of two-thirds of native d one-third of British or foreign parentage; and of the persons years of age, about one half belong to the latter category. The length of time which the non-Australian-born have spent in the cannot, of course, be determined; but it must be abundantly at there is a very large number of persons in New South Wales past life has been very little influenced by Australian con- Thus the mortality experience which the tables show is ity of two kinds. The earlier ages are practically purely ian, whilst the later ages are partly Australian and partly and foreign, the latter element getting stronger as the ages . Therefore, though the expectation here given is correct as the population as at present constituted, it might not be so if stralian-born element predominated so largely at every age as it . the earlier periods. No attempt is made to differentiate the ments of population, with the view of discovering whether it is s is sometimes assumed, that the conditions in Australia are ible for early and middle life, but not for old age, or whether the

the Consolidated Revenue, or an average of £115,901 per a these services:—

Year.	Military Expenditure (including Buildings and Works of Defence).	Naval Expenditure.	Total.	Year.	Military Expenditure (including Buildings and Works of Defence).	Naval Expenditure.
	£	£	£		£	£
1857	31,824	538	32,362	1879	92,216	5,219
1858	23,974	3,296	27,270	1880	72,712	5,683
1859	18,376	6,089	24,465	1881	80,215	5,910
1860	30,373	2,910	33,283	1882	96,387	12,856
1861	68,085	2,275	70,360	1883	117,554	15,312
1862	24,188	4,330	28,518	1884	147,725	14,900
1863	18,845	1,943	20,788	1885	224,318	18,595
1864	25,789	1,054	26,843	1886	200,488	18,696
1865	14,522	2,508	17,030	1887	156,681	6,670
1866	18,167	3,522	21,689	1888	158,479	9,216
1867	23,762	3,772	27,534	1889	206,457	11,582
1868	30,824	4,096	34,920	1890	224,352	11,195
1869	31,278	3,570	34,848	1891	275,343	12,665
1870	22,241	3,612	25,853	1892	240,258	81,746
1871	31,952	3,964	35,916	1893	205,425	13,925
1872	43,055	3,995	47,050	1894	219,158	53,300
1873	48,567	4,886	53,453	†1895	109,498	42,582
1874	81,223	5,034	86,257	1895-6	173,580	47,546
1875	39,092	5,213	44,305	1896-7	166,119	46,885
1876	62,385	5,548	67,933	1897-8	185,960	47,254
1877	117,263	5,565	122,828			
1878	87,590	4,618	92,208	Total ...	4,246,300	563,391

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* Exclusive of £121,630, cost of sending Australian Contingent to the Soudan.

In addition to the sums paid out of current revenue, a lar of loan money has been expended in the erection of fortifica it is expected will serve for the protection of future ge colonists as well as the present. The details of this exp as follow:—

Previous to 1871 .... £80,805.

	£	
1871	43,601	1886
1872	24,466	1887
1873	35,134	1888
1874	22	1889
1875	368	1890
1876	4,506	1891
1877	3,735	1892
1878	33,227	1893
1879	21,270	1894
1880	14,582	*1895
1881	22,640	1895-6
1882	39,757	1896-7
1883	24,819	1897-8
1884	4,683	
1885	54,729	Total

* Six months.

Age.	Expectation of living a year.	Expectation of dying in a year.	Average duration of life.	Age.	Expectation of living a year.	Expectation of dying in a year.	Average duration of life.	Age.	Expectation of living a year.	Expectation of dying in a year.	Average duration of life.
0	·8722600	·1277400	49·60	31	·9928036	·0071964	33·54	61	·9650778	·0349222	13·02
1	·9719879	·0280121	56·78	32	·9926016	·0073984	32·77	62	·9617963	·0382037	12·47
2	·9873909	·0126091	56·37	33	·9922719	·0077281	32·02	63	·9581808	·0418192	11·95
3	·9920207	·0079793	56·09	34	·9919489	·0080511	31·26	64	·9544581	·0455419	11·45
4	·9935094	·0064906	55·54	35	·9915767	·0084233	30·51	65	·9511891	·0488109	10·97
5	·9940609	·0059391	54·90	36	·9910973	·0089027	29·76	66	·9491130	·0508870	10·51
6	·9954520	·0045480	54·22	37	·9906768	·0093232	29·03	67	·9469494	·0530506	10·04
7	·9965826	·0034174	53·41	38	·9903885	·0096115	28·30	68	·9446631	·0553369	9·58
8	·9974189	·0025811	52·65	39	·9900638	·0099362	27·57	69	·9419265	·0580735	9·11
9	·9979421	·0020679	51·78	40	·9896719	·0103281	26·84	70	·9377764	·0622236	8·64
10	·9981725	·0018275	50·89	41	·9892689	·0107311	26·11	71	·9317183	·0682817	8·22
11	·9980949	·0019051	49·98	42	·9887049	·0112951	25·39	72	·9244133	·0755867	7·75
12	·9979674	·0020326	49·08	43	·9879420	·0120580	24·66	73	·9169053	·0830947	7·34
13	·9977893	·0022107	48·18	44	·9872296	·0127704	23·97	74	·9089223	·0910777	6·96
14	·9975604	·0024396	47·28	45	·9866157	·0133843	23·27	75	·9014884	·0985116	6·51
15	·9972391	·0027609	46·40	46	·9861989	·0138011	22·58	76	·8948647	·1051353	6·27
16	·9970221	·0029779	45·52	47	·9858149	·0141851	21·89	77	·8889300	·1110700	5·95
17	·9965866	·0034131	44·66	48	·9853850	·0146150	21·20	78	·8824101	·1175899	5·63
18	·9961593	·0038407	43·81	49	·9848244	·0151756	20·51	79	·8757080	·1242920	5·32
19	·9957653	·0042347	42·98	50	·9838093	·0161907	19·82	80	·8690262	·1309738	5·00
20	·9954553	·0045447	42·16	51	·9821494	·0178506	19·13	81	·8607608	·1392392	4·68
21	·9951667	·0048333	41·35	52	·9804566	·0195434	18·47	82	·8501261	·1498739	4·36
22	·9949639	·0050361	40·54	53	·9789641	·0210359	17·83	83	·8362763	·1637237	4·04
23	·9947709	·0052291	39·75	54	·9771110	·0228890	17·20	84	·8197635	·1802365	3·73
24	·9945492	·0054508	38·95	55	·9758044	·0241956	16·58	85	·7995055	·2004945	3·44
25	·9942850	·0057150	38·16	56	·9752044	·0247956	15·90	86	·7750000	·2250000	3·18
26	·9940897	·0059103	37·38	57	·9740342	·0259658	15·30	87	·7485866	·2514134	2·96
27	·9937435	·0062565	36·60	58	·9724615	·0275385	14·79	88	·7281208	·2718792	2·79
28	·9934788	·0065212	35·83	59	·9709995	·0290005	14·19	89	·7053081	·2946919	2·64
29	·9932225	·0067775	35·06	60	·9686662	·0313338	13·60	90	·6842561	·3157439	2·54
30	·9930151	·0069849	34·30								

Expectation of Life—Females.

Age.	Expectation of living a year.	Expectation of dying in a year.	Average duration of life.	Age.	Expectation of living a year.	Expectation of dying in a year.	Average duration of life.	Age.	Expectation of living a year.	Expectation of dying in a year.	Average duration of life.
0	·8888400	·1111600	52·90	31	·9934405	·0065595	35·65	61	·9736931	·0263069	13·86
1	·9721210	·0278790	58·45	32	·9930435	·0069565	34·88	62	·9713613	·0286387	13·23
2	·9894336	·0105664	59·11	33	·9925462	·0074538	34·12	63	·9680335	·0319665	12·60
3	·9927596	·0072404	58·74	34	·9921147	·0078853	33·38	64	·9656929	·0343071	12·00
4	·9954631	·0045369	58·16	35	·9917070	·0082930	32·64	65	·9625497	·0374503	11·41
5	·9948987	·0051013	57·42	36	·9913404	·0086596	31·91	66	·9594806	·0405194	10·83
6	·9950748	·0049252	56·71	37	·9911013	·0088987	31·18	67	·9564807	·0435193	10·27
7	·9965210	·0034790	55·90	38	·9910626	·0089374	30·46	68	·9532494	·0467506	9·72
8	·9976725	·0023275	55·10	39	·9908016	·0091984	29·73	69	·9483063	·0516937	9·17
9	·9985209	·0014791	54·11	40	·9905482	·0094518	29·00	70	·9427293	·0572707	8·64
10	·9989402	·0010598	53·30	41	·9903673	·0096327	28·27	71	·9355413	·0644587	8·13
11	·9987100	·0012900	52·45	42	·9901798	·0098202	27·54	72	·9275389	·0724611	7·66
12	·9984790	·0015210	51·52	43	·9897077	·0102923	26·81	73	·9171927	·0828073	7·24
13	·9982349	·0017651	50·60	44	·9897463	·0102537	26·08	74	·9076295	·0923705	6·83
14	·9979653	·0020347	49·68	45	·9896694	·0103306	25·34	75	·8984561	·1015439	6·47
15	·9976942	·0023058	48·78	46	·9895765	·0104235	24·60	76	·8893288	·1106712	6·15
16	·9973969	·0026031	47·90	47	·9892714	·0107286	23·86	77	·8803992	·1196008	5·85
17	·9970853	·0029147	47·02	48	·9892917	·0107083	23·11	78	·8748750	·1251250	5·57
18	·9967587	·0032413	46·16	49	·9887459	·0112541	22·36	79	·8673315	·1326685	5·30
19	·9965028	·0034972	45·30	50	·9882762	·0117238	21·61	80	·8600718	·1399282	5·04
20	·9963181	·0036819	44·46	51	·9875086	·0124914	20·86	81	·8530523	·1469477	4·78
21	·9961315	·0038685	43·62	52	·9870483	·0129517	20·11	82	·8446195	·1553805	4·51
22	·9958683	·0041317	42·79	53	·9859112	·0140888	19·37	83	·8343370	·1656630	4·24
23	·9956269	·0043731	41·97	54	·9847452	·0152548	18·64	84	·8262100	·1737900	3·99
24	·9955823	·0044177	41·15	55	·9834462	·0165538	17·92	85	·8117596	·1882404	3·73
25	·9949456	·0050544	40·34	56	·9829926	·0170074	17·21	86	·7953155	·2046845	3·47
26	·9945567	·0054433	39·54	57	·9801426	·0198574	16·52	87	·7795171	·2204829	3·24
27	·9948158	·0051842	38·76	58	·9796364	·0203636	15·85	88	·7590197	·2409803	3·01
28	·9941002	·0058998	37·98	59	·9773721	·0226279	15·17	89	·7300417	·2699583	2·80
29	·9939071	·0060929	37·20	60	·9755284	·0244716	14·51	90	·6557907	·3442093	2·64
30	·9937017	·0062983	36·42								

e calculation was extended to 100 years, but it was deemed advisable
t the table short at 90 years, as the number of persons over that
as altogether too small to afford sufficient experience on which to
a Life Table. As a matter of curiosity, it may be mentioned that
pectation of life at ages over 90 was as follows :—

Age.	Living out of 100,000 born.		Expectation of life in years.	
	Males.	Females.	Males.	Females.
91 ...	761	1,084	2·48	2·72
92 ...	529	767	2·41	2·64
93 ...	361	531	2·36	2·59
94 ...	242	367	2·27	2·52
95 ..	163	250	2·16	2·47
96 ...	106	169	1·96	2·42
97 ...	67	113	1·68	2·37
98 ...	42	75	1·37	2·31
99 ...	26	49	0·80	2·28
100 ...	13	31	0·16	2·31

addition to the expectation of life in New South Wales, in the
wing table will be found a column showing the H.M. (healthy
) table of the Australian Mutual Provident Society. The cor-
onding figures of Dr. Ogle's English Life Table are also given, by
of comparison. And while the after-lifetime at each age in the
table of the A.M.P. Society is higher than that for the colony, the
ation is much the same in each calculation. That one should give an
nate of greater longevity at the different ages than the other is but
ral; for in computing the table for the whole colony, the total
bers of persons living and dying at each period of life are taken into
ideration, whereas in the case of the A.M.P. table, only selected
, or such as would be accepted by an insurance society, form the
of computation. Looking at the two tables, therefore, in their
light, the one is, as it stands, more an index of the correctness of
other than it would be if the figures in both were identical. Dr.
calls the Life Table a *biometer*, and speaks of it as of equal import-
, in all inquiries connected with human life or sanitary improve-
ts, with the barometer or thermometer and similar instruments
loyed in physical research, and as being also the keystone or pivot
which the whole science of life assurance hinges. For even suppos-
that an insurance society had empirically arrived at an equitable
of premium for assuring lives, the Mortality or Life Table is still

required in order to ascertain the value of such premiums for a pective term of years, as against the value of the sums assured so that a statement of assets and liabilities may be periodically pared. Without such knowledge a division of "profits" would impossible. In fact, the Life Table is absolutely essential for "solution of all questions depending on the duration of human life";

Age.	New South Wales.		H.M. A.M.P. Soc.	England. (Dr. Ogle.)	
	Males.	Females.		Males.	Females.
Birth	49·6	52·9	....	41·4	44·6
5 years	54·9	57·4	....	50·9	53·1
10 ,, ...	50·9	53·4	....	47·6	49·8
15 ,, ...	46·4	48·8	....	43·4	45·6
20 ,, ...	42·2	44·5	46·0	39·4	41·7
25 ,, ...	38·2	40·3	41·8	35·7	38·0
30 ,, ...	34·3	36·4	37·5	32·1	34·4
35 ,, ...	30·5	32·6	33·4	28·6	30·9
40 ,, ...	26·8	29·0	29·3	25·3	27·5
45 ,, ...	23·3	25·3	26·4	22·1	24·1
50 ,, ...	19·8	21·6	22·6	18·9	20·7
55 ,, ...	16·6	17·9	18·9	16·0	17·3
60 ,, ...	13·6	14·5	15·2	13·1	14·2
65 ,, ...	11·0	11·4	12·0	10·6	11·4
70 ,, ...	8·6	8·6	9·6	8·3	9·0
75 ,, ...	6·5	6·5	7·1	6·3	6·9
80 ,, ...	5·0	5·0	4·8	4·8	5·2
85 ,, ...	3·4	3·7	3·4	3·6	3·9
90 ,, ...	2·5	2·6	2·4	2·7	2·9

VACCINATION.

Vaccination is not compulsory in New South Wales, and is to chiefly in times of scare, when an epidemic of small-pox is to be imminent. It is easy to discover from the returns of the ment vaccinators the years when the community was threatened disease, as at such times the number of persons submitting vaccination largely increased. The number returned does not those treated by private medical officers, by whom a large number cinated. The following figures show the number of persons ;ed by Government Medical Officers since the year 1878 :—

Sydney and Suburbs.	Country.	Total.	Year.	Sydney and Suburbs.	Country.	Total.
532	3,038	3,570	1888	1,091	1,095	2,186
657	4,981	5,638	1889	728	1,676	2,404
460	4,699	5,159	1890	958	1,239	2,197
8,738	52,501	61,239	1891	531	1,036	1,567
380	1,869	2,249	1892	1,326	2,688	4,014
296	600	896	1893	838	1,709	2,547
630	6,569	7,199	1894	15	1,942	1,957
346	1,884	2,230	1895	72	2,360	2,432
452	1,311	1,763	1896	78	867	945
1,031	2,199	3,230	1897	6	239	245

number and ages of persons vaccinated by the Government . Officers during 1897 will be found below :—

District.	Under 1 year.	From 1 to 5 years.	From 5 to 10 years.	10 years and upwards.	Total
·dney and suburbs...	......	......	......	6	6
›untry districts	2	33	104	100	239
Total	2	33	104	106	245

INSANITY.

number of insane persons under treatment in hospitals in New Wales is steadily, if slowly, increasing; but this increase in r is only the experience of the United Kingdom and other ›s, as well as of most of the Australasian colonies. The ls for insane, under the immediate control of the Government of ›uth Wales, are seven in number—six for ordinary insane, and Parramatta, for criminals. Besides these there are two licensed each for a single patient, at Picton; one at Ryde for seven s; and another at Cook's River, near Sydney, containing 37 t.

ıumber of insane persons under treatment on the 31st December, ınder official cognisance, was 3,951. These figures are 110 in ›f the number on the register at the end of 1896, and 235 higher t the end of 1895. From the table given below, showing the ıtion of the patients, it will be seen that, in addition to the inmates of the New South Wales asylums, six were located in ls in South Australia. This was in terms of an arrangement

3 A

which has been made with the Government of that colony, whe
patients from the Broken Hill district are sent to South Australia :—

Name of Hospital.	Number on Register.		
	Males.	Females.	Total.
Government Hospitals—			
Callan Park	448	399	847
Gladesville	514	324	838
Parramatta, free	686	375	1,061
Do criminal	46	8	54
Newcastle	145	152	297
Rydalmere	351	151	502
Kenmore	200	107	307
Licensed Houses—			
Cook's River	15	22	37
Picton (two)	......	1	1
Ryde	......	7	7
South Australian Hospitals	3	3	6
Totals	2,408	1,549	3,957

The proportion of insane to the whole population, as already poi
out, is now slowly increasing, although it was practically a consta
quantity until 1890. This will be seen from the accompanying tab
giving the number of persons in hospitals for insane at the close of eac
year from 1878 to 1897 inclusive. The increase during the last fe
years is noteworthy, especially in face of the stoppage of the i
of insane patients into the colony from other places :

At end of year.	No. of Insane.	Proportion of Insane per 1,000 of population.	At end of year.	No. of Insane.	Proportion of Insane per 1,0 of popu
1878	1,916	2·85	1889	2,974	2·79
1879	2,011	2·83	1890	3,102	2·82
1880	2,099	2·83	1891	3,134	2·74
1881	2,218	2·90	1892	3,312	2·77
1882	2,307	2·89	1893	3,425	2·80
1883	2,403	2·87	1894	3,587	2·85
1884	2,524	2·86	1895	3,716	2·91
1885	2,643	2·85	1896	3,841	2·96
1886	2,717	2·80	1897	3,951	2·90
1887	2,821	2·81			
1888	2,898	2·80		Mean. . . .	2·82

The amount of insanity in New South Wales is less than in
part of the United Kingdom. The greatest proportion of lunacy in
Australasian colonies is found in Victoria, and the lowest in T

ith **Australia**, as will be seen from the following table, based on
l of five years. It should be pointed out that the rate for
n Australia only represents the accommodation in the asylums
colony, many patients having been refused admission owing to
room.

Country.	Insane persons per 1,000 of population.	Country.	Insane persons per 1,000 of population.
ngland and Wales...	3·1	Queensland	3·1
otland	3·3	South Australia	2·6
eland	4·5	Western Australia ...	1·6
ew South Wales ...	2·9	Tasmania	2·3
ictoria..................	3·5	New Zealand	3·2

percentage of deaths of insane persons in New South Wales
aratively light. The following table has been computed on the
the average number of patients resident in hospitals for the
—

	Percentage of deaths of average number resident.			Year.	Percentage of deaths of average number resident.		
	Males.	Females.	Total.		Males.	Females.	Total.
	7·59	6·31	7·10	1894	6·12	5·22	5·77
	7·73	6·43	7·23	1895	6·83	5·27	6·24
	7·00	5·73	6·52	1896	7·18	4·67	6·22
	8·42	5·65	7·39	1897	7·51	4·91	6·52
	6·26	5·72	6·06				
	8·37	5·88	7·42	Mean...	7·29	5·53	6·62

s been suggested that there is a very intimate connection between
cial depression and the increase in the number of insane persons
d to the asylums of the colony. A glance at the figures for
nd succeeding years, during which such depression has been
elt, would seem to favour this view, seeing that the proportion
usand of the population advanced from 0·52 in 1891 to 0·56 in
58 in 1894, and 0·57 in 1896. But these figures do not finally
of the question, for during the seven years which closed with
a period of general prosperity—the admissions ranged from 0·72
per thousand. It is very probable that the most immediate
f depressed times is to send to the asylums a number of harmless
nented persons, who in more prosperous days are supported by
latives. On the other hand, the quota of admissions to asylums
perous times is maintained by insanity induced directly or
tly by the means of indulgence which high wages and large
ommonly afford. The number of admissions to the hospitals

for insane, and the proportion per 1,000 of the mean population, as shown below:—

Year.	Admissions.	Proportion to population per 1,000.	Year.	Admissions.	Proportion to population per 1,000.
1878	424	0·64	1889	550	0·50
1879	440	0·63	1890	611	0·54
1880	476	0·65	1891	596	0·52
1881	494	0·64	1892	666	0·56
1882	473	0·59	1893	688	0·57
1883	476	0·57	1894	712	0·58
1884	493	0·55	1895	715	0·57
1885	567	0·60	1896	740	0·57
1886	567	0·58	1897	692	0·53
1887	532	0·52			
1888	587	0·55		Mean	0·56

Until June, 1893, there was no law in force in this colony to preve the influx of insane persons, and, as a consequence, the splend hospitals which the bounty of the State has established for t treatment of the insane were the means of burdening the communi with the care of unfortunate persons belonging to other countries whe the treatment meted out to the insane is less generous or less scienti than in New South Wales. On the date mentioned, Act 56 Vi No. 23 came into force. Section 4 of this measure renders the owne charterer, agent or master of a vessel liable for the maintenance of a insane person landed in the colony.

The following figures show the birthplaces of patients under ca the hospitals for the insane during the year 1897:—

Country	No. of Patients.	Percentage of total.	Country.	No. of Patients.	Per
New South Wales...	1,832	37·87	France	28	0·58
Other British Colonies	279	5·77	Germany	111	2·29
England	1,000	20·67	China	84	1·74
Scotland	225	4·65	Other countries	245	5·07
Ireland..................	1,033	21·36			

In this table and the two following the figures represent the tot number of patients under care during the year 1897, and not the numbe remaining on the register on the 31st December, as previously give It will be seen from the figures set down above that the number o persons under restraint who are natives of this colony forms only 37·8 per cent. of the total, whilst, it may be pointed out, the native-bor element of the total population is above 64 per cent. Of the Briti born patients, England contributes over one and a half times th number that her population in this country would warrant, and Irela nearly three and a fifth times the number.

e ages of the 4,837 insane patients under care during 1897 were as ded. Nearly one half of the whole number—47·76 per cent.—were en the ages of 30 and 50 years.

Ages of Insane.	No. of Patients.	Percentage of all ages.
Under 5 years	8	0·17
5 and under 10 years	43	0·89
10 " 15 "	64	1·32
15 " 20 "	212	4·38
20 " 30 "	843	17·43
30 " 40 "	1,217	25·16
40 " 50 "	1,093	22·60
50 " 60 "	846	17·49
60 " 70 "	372	7·69
70 " 80 "	113	2·34
80 " 90 "	21	0·43
90 years and upwards	5	0·10

venile lunatics are as a rule sent to the Hospital for the Insane ewcastle—an asylum which is set apart for imbecile and idiotic nts; so that of the 115 mentioned in the foregoing table as being r 15 years of age, the majority were in that institution.

e major portion of the persons under restraint in 1897 were single. ngst the married and widowed, females largely predominated.

Conditions as to Marriage.	Males.	Females.	Total.
Single	1,993	825	2,818
Married	584	814	1,398
Widowed	115	199	314
Unascertained	216	91	307

is popularly supposed that the principal cause of insanity is intem- nce. The experience of this colony, however, does not bear out this ion. The amount of insanity directly due to drink, though certainly , is not so considerable as that due to other causes. As far as the ds of the hospitals show, the proportion of persons admitted suffer- rom insanity traceable to intemperance was not more than 9·55 per of the total admissions for the ten years ending with 1897.

rsons suffering from mania induced by excess of drink recover com- tively quickly, and at any one time their number in the hospitals he insane is scarcely more than 5·5 per cent. The most potent e appears to be hereditary influence. How far this is productive nity cannot, however, be exactly determined; for although the ector-General of the Insane has ascertained that hereditary ence and congenital defect can be credited with only 11·16 per

The water supply works of the Lowe
the Government, under the provisions
Supply and Sewerage Act of 1880.
of a special Act, a Board was establi
of the Metropolitan Water and Sew
members also being the same—three bei
one elected by the Municipal Council of
municipalities, and one by the municip
land and Morpeth. The following m
within the area of the Board's jurisdict
Hamilton, Lambton, Lambton (New), E
Merewether, Morpeth, Newcastle, Platt
Wickham, besides the unincorporated t
Creek.

The supply of water for the district
River, about a mile and a half up stre
West Maitland. The pumping engines
on a hill about 44 chains from the ri
there is a settling tank of 1,390,500 ga
feet by 100 feet each, a clear water tan
and a storage reservoir of 172,408,100 g
filtered water is pumped from the clea
reservoirs, one at East Maitland and o
connected by a 10-inch cast-iron mai
with a capacity of 463,430 gallons, and

year 1897 the deaths of persons afflicted with lunacy viz., 177 males and 72 females. The following are the , and the number who died from each disease :—

Cause of Death.	Males.	Females.	Total.
:—			
paralysis	4	4	8
onvulsions	15	8	23
sis	37	3	40
nelancholic exhaustion and decay	8	8	16
and other diseases of the brain, mour, &c.	35	12	47
:—			
of lungs, pleura, and bronchi	8	4	12
sumption	18	5	23
t and blood-vessels	13	7	20
ng	1	......	1
se :—			
and ulceration of stomach, intes- eritoneum	8	2	10
diarrhœa	4	2	6
	1	1	2
r	......	1	1
us	......	1	1
and old age	17	6	23
	5	2	7
	......	1	1
	......	5	5
	1	......	1
	1	......	1
	1	......	1
Total	177	72	249

e total, 24 males and 13 females were from 70 to 90 so that the malady of lunacy is not incompatible with

weekly cost of maintaining insane patients in the hospitals ar 1897 was about 10s. 8¾d. per head, of which the 3d., the balance being made up by contributions from the patients themselves, or by their friends. The subjoined

pastoralist by granting him fixity of tenure of one half of hi
a term of years, the leasehold half being exempt from
purchase during his tenure; but the leases were appraised at
rent, which considerably increased the revenue from this
following years. In 1890 an Act was passed under which th
Crown leases, as appraised in 1884, were determined anew; and i
which the new appraisement was less than the previous one, th
ment refunded the amount which had been overpaid, with i
5 per cent. The first refunds under the Act were made du
in which year the amount, including interest, was £12
corresponding amount for 1893 was £392, and for 1894—
in which a refund was made—only £32.

Prior to the passing of the 1884 Act the only forms of le
were pastoral, annual, special, and pre-emptive. Under th
tioned, provision was made for the continuance of each of the
lease except the pre-emptive, which was abolished: and
licenses, and conditional and homestead leases, were estab
supplementary Act of 1889 provided for five additional for
which were as follow:—Scrub, snowland, artesian well, resid
inferior land. Under the Land Act of 1895 three new
been provided for.

The gross revenue derived from alienation and occupatio
gross and net land revenue, from 1880 to 1898, were as follo

Year.	Alienation.		Occupation.		Gross Revenue from Lands.	Refund
	Sales, etc.	Conditional Purchases. ‡	Pastoral. §	Mining, etc. ‖		
	£	£	£	£	£	£
1880	731,353	650,674	237,660	26,749	1,646,436	41,10
1881	1,415,460	1,067,879	309,170	28,480	2,820,989	96,64
1882	1,306,300	1,148,741	430,417	28,936	2,914,394	116,92
1883	338,234	931,235	358,957	27,643	1,656,069	162,49
1884	411,202	952,281	344,096	45,765	1,753,344	174,32
1885	535,508	778,849	517,156	44,939	1,876,452	106,83
1886	375,458	830,965	391,749	45,846	1,644,018	100,06
1887	349,585	872,192	1,100,423	56,795	2,378,995	66,02
1888	316,034	896,249	941,521	114,449	2,268,253	57,61
1889	214,691	934,480	917,491	70,901	2,137,563	87,13
1890	225,387	1,153,377	785,116	79,159	2,243,039	84,39
1891	191,696	1,154,979	848,960	71,001	2,266,636	149,63
1892	224,164	1,015,175	915,378	59,345	2,214,062	158,49
1893	252,782	1,044,710	849,652	59,123	2,206,267	91,08
1894	234,408	1,052,198	789,278	49,291	2,125,175	46,42
*1895	36,378	852,823	139,219	24,932	1,053,352	15,66
†1896	67,896	1,093,138	800,921	55,781	2,017,736	41,49
†1897	68,599	1,082,516	748,779	53,535	1,953,429	54,59
†1898	99,392	1,150,060	725,279	56,870	2,031,601	54,78

* Six months ended 30th June. † Twelve months ended 30th June. ‡ Inclu

§ Includes all Miscellaneous Receipts except Survey Fees and Timber Licenses
Timber Licenses.

ı the hospitals for the insane has increased by 36·34 per cent., ıng the same period the increase in expenditure has only 1·95 per cent.

.l lunatics are confined at Parramatta. At the end of 1897 r in confinement was 54, of whom 46 were males and 8 females, ǝd with 58 twelve months before. The offences for which the nsane are detained are amongst the blackest in the calendar, seen from the following table, which refers to the number in tion on the 31st December, 1897 :—

rimes committed by the Insane.	Number of Insane.		
	Males.	Females.	Total.
	18	5	23
murder	1	2	3
	1	......	1
sault	2	......	2
›ffence	2	......	2
wounding, shooting with intent, etc.	11	1	12
ıorse stealing	1	......	1
	4	......	4
malicious burning	1	......	1
	1	......	1
noney under false pretences	2	......	2
truction on railway line	1	......	1
l robbery	1	......	1
Total	46	8	54

.on in the hospitals for the insane is usually terminated by .rge of the patient on recovery, or for probation when relief ıfforded, to which, of course, must be added removal by death. the few cases where patients absconded, the following figures .epartures during the last ten years :—

Discharged.				Died.	
Recovered.		Relieved.			
Males.	Females.	Males.	Females.	Males.	Females.
167	108	20	11	132	68
135	109	8	4	138	71
141	116	21	8	128	65
168	129	11	17	167	66
154	107	17	14	122	69
156	130	21	21	172	74
162	134	27	27	130	69
175	133	32	20	151	72
185	147	26	19	165	66
149	138	17	23	177	72
1,592	1,251	200	164	1,482	692

During the period included in the above table 5,722 male and 3,6 female patients were under treatment; therefore the proportion per ce of the total number belonging to each class was—

	Per cent. of Patients.	
	Males.	Females.
Recovered	27·82	34·21
Relieved	3·50	4·46
Died	25·90	18·32

The returns for the same period show the following results:—

	Males.	Females.
Average annual discharges	179	142
Average annual readmissions	46	37

whence it appears that of the patients discharged as recovered relieved, some 25·4 per cent. of males and 26·3 per cent. of females readmitted. Deducting, therefore, from the number of discharges t probable cases of relapse, it will be found that on an average the sam number of permanent recoveries, temporary recoveries, and deaths w be represented in the following proportions:—

	Males.	Females.
Permanent recoveries	408	495
Temporary recoveries	139	177
Deaths	453	328

Hence it may be said that out of every thousand males who bec inmates of asylums for the insane, 408 will be released from th suffering by recovery, and 592 only by death; and of females, t proportion will be 495 by recovery, and 505 by death. As the aver age of the patients does not differ greatly in the case of both sexes, t comparison may be accepted as a fair one, especially as the average ti of residence in the asylum is also about the same.

The average period of residence can be determined indirectly fro comparison between the number of persons admitted and those resid on a given date, and it would appear that for the ten years wh closed with 1897, the average was 5·26 years for males and 5·13 females.

As the annual cost of each patient is £24 1s. 2d., every person w is admitted to the hospitals for the insane entails a loss to the St of about £125.

INSTRUCTION, SCIENCE, AND RELIGION.

INSTRUCTION.

'HE history of primary education in New South Wales is naturally divided into four periods. During the first period, which lasted il 1848, the system in force was purely denominational, the Govern- it granting to the heads of religious bodies assistance in proportion he amount expended by them for educational purposes. There was rovision for the establishment of schools entirely under State control, considerable dissatisfaction was the result. As early as 1834 there been attempts to secure a modification of the system in force, and .839 a grant was made for the purpose of imparting instruction, free n sectarian influence, to the children of those persons who objected lenominational education. It was not, however, until 1844 that any nite steps were taken in the direction of effecting a change in the cational policy of the State. In that year a Committee of the Legis- ve Council reported in favour of the adoption of the Irish National ool system, and, in accordance with this recommendation, an Act s passed in 1848 constituting two Boards, to one of which was rusted the administration of denominational education, and to the er the undenominational, or, as it was called, the National system ; mary education in the colony thus entering upon its second period. is anomaly of two rival Boards, after existing for eighteen years, was lished by the Public Schools Act of 1866, which, though providing the continuance of the two distinct classes of schools, placed all ools receiving aid from the State under the control of a Board pointed by the Government, and styled the Council of Education, the blic schools being entirely administered by this Board, and the nominational schools governed in conjunction with the various religious dies by whom they had been founded. Although the system estab- hed by this Act was essentially one of transition, education neverthe- ss made considerable progress during the period when it was in force. t was, however, found impossible to maintain this dual system, not only n account of its intrinsic defects, but because the principle of granting tate aid to religious schools was repugnant to the feelings of the ajority of the people, and in 1880 State aid to denominational ducation was abolished by an Act passed under the auspices of Sir Henry Parkes, and the colony entered upon the fourth, and present, eriod in the history of primary instruction.

Under the Public Instruction Act of 1880, which received the I
assent on the 16th April in that year, the entire educational syst
the colony was remodelled. In the first place, the Education A
1866 was repealed, the Council of Education dissolved, and the c
of educational matters placed in the hands of a Minister for P
Instruction. Provision was made for the establishment and mai
ance of public schools, to afford primary instruction to all chi
without sectarian or class distinction; of superior public schoo
which additional lessons in the higher branches might be give
evening public schools, with the object of instructing persons wh
not received the advantages of primary education while of school
and of high schools for boys and girls, in which the course of instr
should be of such a character as to complete the public school
culum, or to prepare students for the University. It was provided
in all schools administered under the Act the teaching should be st
non-sectarian; but the words "secular instruction" were held to in
general religious teaching, as distinguished from dogmatical or pol
theology. The history of England and of Australia, it was de
should form part of the course of secular instruction. Four
during each school day were to be devoted to secular instr
exclusively; but it was provided that another hour each day mig
set apart for religious instruction, to be given in a separate clas
by a clergyman or religious teacher of any persuasion to children
same persuasion whose parents had no objection to their receivin
religious instruction.

This provision permitting religious instruction to be given to sc
in State schools has been taken advantage of to some extent by
of the denominations. Ten salaried teachers are employed b
Church of England in the Diocese of Sydney to give special rel
instruction in public schools. One of the Bishop's chaplains hol
appointment of Diocesan Inspector of Schools, but he has no aut
outside the classes for special religious instruction. The Presby
and Wesleyan clergy also visit the public schools for the p
of imparting religious instruction to children belonging to
denominations.

It is compulsory for parents to send their children between th
of 6 and 14 years to school for at least seventy days in each hal
unless just cause of exemption can be shown. Penalties are pr
by the Act for breaches of this provision. But although educat
compulsory, it is not altogether free, for parents are required to
weekly fee of 3d. per child, but not exceeding 1s. in all for the child
one family. Power is given, however, to the Minister, and to the
Board subject to ministerial approval, to remit the fees where it is
that the parents are unable to pay. The fees, except those receive
pupils attending evening schools, are not the property of the t
but are paid into the Consolidated Revenue Fund. School childr
allowed to travel free by rail to the nearest public or private

ly met from the trust funds. The position of each account on June, 1898, was as follows :—

Centennial Park Account.		General Post Office New Street Resumption Account.	
Receipts.	Payments.	Receipts.	Payments.
£	£	£	£
....	20,285	....	....
....	66,785	....	....
....	56,913	....	....
....	26,250	5,811	159,648
479	28,040	24	177,730
12	1,629	27,216	87,815
....	....	102,523	29,947
....	....	....	16,047
....	....	....	132,929
....	24,961	....	696
....	....	....	25
6	....	466	178
497	224,863	136,040	605,015
Dr. £224,366		*Dr.* £468,975	

* Six months ended 30th June. † Twelve months ended 30th June.

TRUST FUNDS.

ust Account forms a very important division of the public not only from the nature of the transactions and the volume ulated funds, but also by reason of the manner in which the are operated upon in conjunction with the general finances of y. To show the growing importance of the Trust Account, the table has been compiled. In 1871 the amount at credit was ; in 1881, £1,671,183; in 1891, £4,997,055; the sum held

in 1898, however, was by far the mos
the Government and yielded to the i
of the 1888 and 1895 loans, which
1898 loan was placed.

In the foregoing pages much has be
colony. It would, therefore, be on
resources on which the colony may
creditors, but before examining the
well to recapitulate the liabilities outs

Public Debt, including Treasury Bill
Treasury Bills in aid of Revenue ...
Uninvested Trust Funds ....

Total........... ....

No allowance has been made in th
credit of either loans or trust account
General Loan Account is allotted, a
services, whilst the Trust Funds are
securities or cash. The interest pay
outstanding amounts to £2,386,394.
the colony are the public works, els
which yield an income of £1,673,00
and working have been defrayed;
124,184,000 acres are leased for p
20,240,000 acres sold on deferred pay
of which amounts to £11,624,000, be
5 per cent. From the public estate th

umber of children given above as enrolled in the various schools in almost every case, the actual school attendance, as the gross it for the year is given, and not the mean for each quarter. er information cannot be obtained except for recent years, but es as they stand give a basis of comparison which is not without

llowing table shows the gross enrolment of distinct children he ten years which closed with 1897, as well as the quarterly it, in the public and private schools of the colony, omitting ersity. The mean quarterly enrolment may be taken as giving est approximation to the number of children actually under n State and private schools :—

Schools.	Teachers.	Scholars.		
		Gross enrolment.	Mean quarterly enrolment.	Percentage of children of school age in mean quarterly enrolment.
2,950	5,767	226,856	201,083	80·7
3,073	5,886	232,840	206,326	80·9
3,120	6,574	237,853	212,969	81·3
3,161	7,028	250,691	223,296	82·6
3,221	7,353	256,388	231,954	82·8
3,302	7,305	255,678	231,728	81·0
3,371	7,419	257,281	232,694	79·5
3,447	7,422	268,047	243,726	81·4
3,467	7,529	275,570	250,992	82·3
3,525	7,788	282,300	258,090	81·4

e gross enrolment for 1897 the 1,027 children in reformatories, al schools, and charitable institutions were not included. Taking to account, 81·6 per cent. of all the children of school age were g instruction in schools. The ages of children enrolled at State ate schools during 1897 were as follow :—

Age Period.	State Schools.	Private Schools.	Total.
Under 6 years	12,857	6,581	19,438
6 and under 14 years	194,922	42,890	237,812
14 years and over ...	18,378	6,672	25,050
Total	226,157	56,143	282,300

r the Public Instruction Act it is only compulsory to send between the ages of 6 and 14 years to school; but children of

5 years of age are received at the public schools, and, as will be from the figures given, many scholars of that age are in attendanc State and private schools, as well as a very considerable number have passed the school age.

According to the Census of 1891, the number of children of sc age in New South Wales—that is to say, those who were not les 6 years of age, and had not passed the age of 14—was 211,8 whom 184,860 were receiving instruction in public and private sch and public institutions, namely, 148,870 at State schools, and remainder at the various private and denominational schools, refor atories, and charitable institutions in the colony; 10,810 were receivi instruction at home; and 16,210 were under no tuition, but t number must have included a number of boys who had left scho The number of children of school age receiving instruction formed 9 per cent. of the total; and in addition there were 26,981 childr outside the limits of school age who were in attendance at St schools, 11,179 at private and denominational schools, as well as students at the University of Sydney. The total known enrolment private schools during the December quarter of 1897 was 56,143, a the average attendance, 44,915. Of the net yearly enrolment at State schools, 72·7 per cent. of the children attended school 70 days more in the first half of 1897, and 81·1 per cent. in the second half the year.

Owing to the sparseness of the population in nearly all the coun districts of the colony, the compulsory clauses of the Instruction A cannot be strictly enforced. Nevertheless, the number of childr growing up in absolute ignorance is by no means great, and, though t proportion of such children cannot be even approximately determin there is sufficient evidence to warrant the conclusion that it is steadi decreasing. At the Census periods of 1861, 1871, 1881, and 1891, t degree of education of every 10,000 children from 5 and under 10 ye of age was as follows:—

	1861.	1871.	1881.	1891.
Read and write	2,355	3,470	4,413	5,377
Read only	3,289	2,752	1,982	1,368
Unable to read	4,356	3,778	3,605	3,255

Taking the children from 10 and under 15 years, the comparison still more satisfactory:—

	1861.	1871.	1881.	1891.
Read and write	6,769	7,666	8,804	9,705
Read only	1,854	1,292	614	143
Unable to read	1,377	1,042	582	152

The steady decrease in the proportion of illiterate children from 18 to 1871, and from 1871 to 1881, is plainly visible from the above tab and the Census of 1891 showed that this satisfactory decre continued.

STATE SCHOOLS.

the present Public Instruction Act came into operation on April, 1880, the Council of Education ceased to exist, and ver to the new administration the schools which at that time er its control. At the date mentioned there were maintained ised by the Government, 1,220 schools, attended by 101,534 thus distributed :—

	No. of Schools.	No. of Pupils.
ublic	705	68,823
rovisional	313	8,312
alf-time	97	1,683
enominational	105	22,716
Total	1,220	101,534

close of 1882 the connection of the denominational schools State ceased, and the subsequent year is marked, as was to have ected, by a considerable falling off in the number of children receiving their education at the expense of the State. The ly operated for a short period, as the year 1884 showed a of more than the ground lost. This will be seen by the follow-, which shows the enrolment and attendance of children at State-l schools under the Public Instruction Act only :—

Year.	Gross enrolment of distinct children.	Quarterly enrolment.	Average attendance.
1882	159,490	134,872	90,944
1883	155,824	130,205	88,546
1884	167,134	139,159	95,215
1885	180,929	146,570	100,462
1886	179,990	153,244	105,538
1887	184,060	157,262	106,408
1888	186,692	160,919	112,220
1889	191,215	164,701	114,569
1890	195,241	170,357	116,665
1891	205,673	178,278	122,528
1892	210,641	186,207	132,580
1893	210,277	186,327	128,322
1894	206,265	181,678	130,089
1895	216,396	192,075	139,978
1896	221,603	197,025	142,192
1897	226,157	201,947	148,381

the time of the withdrawal of aid from denominational schools e end of 1897 the increase in the average quarterly enrolment at hools was 49·7 per cent. In 1897 the proportion of the popu-rolled at State Schools, on the basis of the quarterly returns, per cent., as compared with 15·3 per cent. in 1896 ; and the proportion in average attendance, 11·3 per cent. as compared with per cent. in 1896. The increase in the average quarterly enrolm to the end of 1897 was as follows :—

Year.	Per cent.	Year.	Per cent.
1885	5·3	1892	4·4
1886	4·6	1893	0·1
1887	2·6	1894	*2·5
1888	2·3	1895	5·7
1889	2·4	1896	2·6
1890	3·4	1897	2·5
1891	4·6		

* Decrease.

In the course of the year 1897, the Department received 173 appl tions for the establishment of schools in various parts of the colony which 89 were granted, 69 refused, and 15 were still under consid tion at the end of the year. Of the applications granted, 12 were public schools, 52 for provisional schools, 9 for half-time schools, house-to-house schools, and 13 for evening schools.

The number of schools under the direct control of the Departm during 1897 was 2,577, or 2,790 departments, thus classified :—

	Departments
High Schools	5
Public Schools—Superior	248
,, Primary	1,720
Provisional Schools	294
Half-time Schools	457
House-to-house Schools	41
Evening Schools	25
Total	2,790

These schools provided accommodation for 245,283 pupils, being increase of 5,929 pupils on the number for whom accommodation provided in the previous year.

Below will be found a statement giving the number of State Sch in each of the Australasian colonies in 1897, together with the num of scholars in average attendance :—

Colony.	Schools.	Teachers.	Scholars in Average Attendance.	Average attendance of Pupils per School.
New South Wales	2,577	4,626	148,381	57
Victoria	1,874	4,712	140,463	75
Queensland	797	1,825	59,748	75
South Australia	656	1,242	42,219	64
Western Australia	167	371	8,970	54
Tasmania	282	520	12,022	43
New Zealand	1,585	3,628	110,523	70
Australasia	7,938	16,924	522,326	

ng to an investigation made a few years ago, all children the public schools of the colony are taught to read; 90 per nstructed in writing, arithmetic, music, and drill, and receive and moral as well as object lessons; 88 per cent. in drawing; nt. write to dictation; 40 per cent. are instructed in the nglish grammar; and 39 per cent. are taught geography and while over 80 per cent. of the girls receive instruction in s. The following table shows the number of children who e standard of proficiency in each of these subjects in 1897:—

Subject.	Number of Pupils Examined.	Number of Pupils Passed.	Percentage up to or above Standard.
ll pupils	160,183	136,442	85
ary prose only	62,598	55,514	88
ll pupils	159,888	135,556	84
er only	96,655	82,376	85
	128,980	104,087	80
—All pupils	157,826	117,838	74
rules only	23,078	16,157	70
All pupils	63,424	46,463	73
ed only	30,139	21,840	72
—All pupils	63,421	48,329	76
ed only	32,754	25,150	76
nglish	63,325	43,840	69
ian	11,120	7,993	71
d Moral Lessons	154,526	120,065	77
	152,480	124,208	81
	55,891	49,926	89
	146,774	116,176	79
	152,344	124,382	81
ons	151,295	118,586	78

er subjects are only taught in the fourth and fifth classes. 7,870 pupils were examined in Euclid, of whom 76 per cent. ,047 in algebra, of whom 77 per cent. passed; 5,344 in on, of whom 65 per cent. passed; 61 in trigonometry, of per cent. passed; 7,976 in natural science, of whom 78 per ed; and 2,005 in Latin and 2,171 in French, of whom there pectively 74 and 72 per cent.

ate provides separately the necessary facilities for acquiring knowledge under a system of training about which more will ther on.

chers in the public schools of the colony at the end of 1897 4,626, of whom 2,421 were males, and 2,205 females. This crease of 184 on the number of the previous year. The umber of pupils per teacher, on the basis of the mean enrolment, was 44, and the average attendance per teacher, 32, average quarterly enrolment of children per school department

The amounts per inhabitant for the same countries are sho

Country.	Gold.	Silver.	Uncovered Paper.
	£ s. d.	£ s. d.	£ s. d.
United Kingdom	3 0 8	0 12 8	0 11 8
Austria-Hungary	0 16 4	0 5 10	0 16 3
Belgium	1 2 8	1 16 1	2 5 11
Bulgaria	0 1 3	0 8 6	....
Denmark	1 7 7	0 9 8	0 11 5
France	4 2 6	2 7 5	0 12 9
Germany	2 11 6	0 16 9	0 9 9
Greece	0 0 10	0 2 6	2 4 0
Italy	0 12 9	0 6 0	1 1 2
Netherlands	0 18 4	2 6 10	1 11 6
Norway	0 15 5	0 4 1	0 7 10
Portugal	0 4 6	0 7 9	2 0 7
Roumania	1 7 5	0 7 6	0 8 4
Russia	0 18 8	0 2 4	0 14 11
Servia	0 4 10	0 3 0	0 4 3
Spain	0 10 4	0 11 2	1 3 7
Sweden	0 8 10	0 4 1	0 15 11
Switzerland	1 12 11	0 14 8	0 19 8
Turkey	0 9 0	0 7 3	....
China	....	0 8 0	....
India	....	0 13 3	0 0 6
Japan	0 7 4	0 8 7	....
Siam	0 16 6	7 19 2	....
Straits Settlements	....	13 2 1	....
Egypt	2 14 8	0 2 8	....
Canada	0 12 10	0 4 0	1 8 1
Central American States	0 1 3	1 3 7	0 10 6
Cuba	0 11 5	0 3 5	....
Haiti	0 16 6	0 18 6	0 16 11
Mexico	0 2 10	1 14 8	0 1 4
South American States	0 7 2	0 3 10	3 0 4
United States	1 19 4	1 15 9	1 2 5
Hawaii	9 8 10	1 17 10	....
Cape Colony	4 10 9	0 2 5	....
South African Republic	6 18 1	0 5 8	....
Australasia	6 8 4	0 5 7	....

MOVEMENTS OF GOLD.

Since the discovery of gold in the year 1851 large quanti metal—in the form of coin as well as bullion—have been ex the Australasian colonies every year. The returns of gold im exported from each of the colonies, calculated for ten-year p the year 1851 to the end of 1897 are given herewith. The show the amount by which the exports have exceeded the im various colonies, or *vice versa*, as the case may be. The large of gold, it will be found, are the largest producers, as Vic of training under qualified teachers. Few teachers trained the colony find employment under the department. At the Fort-Training School for males 25 students attended the course of g during the year; while at the Hurlstone Training School for students, the number in residence was also 25. At the beginning 5 new regulations came into force, under which the period of train- these schools was reduced from two years to twelve months, with ovision that students who obtain a certain classification at the end year's training shall be granted a University Scholarship for a of twelve months, renewable for a second year under certain ons. In 1897 the pupil-teachers in the service numbered 1,005, of 347 were males and 658 females. The pupil-teachers are carefully l, and are taken on probation for three months before they are ently employed. If approved, they have to serve a term of four when if they are successful in passing the necessary examinations ay enter one of the training schools.

local supervision of the public schools is placed in the hands of Boards appointed in the various districts of the colony, under visions of the Public Instruction Act. These Boards are supposed cise a general oversight in regard to the public schools in their s, but cannot interfere with the internal discipline or management schools, which remain under the direct control of the Minister of Instruction, through the inspectors and other officers of his nent. The total number of Boards in operation at the close of as 296.

average cost per child in average attendance at the public schools atly varied, as will be seen by the following table, which gives ounts for the last ten years:—

Year.	For school premises.			For the maintenance of schools.			For administration and training schools.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1888	0	15	1	4	1	8	0	9	8	5	6	5
1889	0	19	1	4	2	6	0	9	4	5	10	11
1890	1	5	10	4	5	3	0	9	8	6	0	9
1891	1	11	3	4	5	0	0	9	4	6	5	7
1892	1	3	9	4	3	6	0	8	7	5	15	10
1893	0	17	7	4	5	8	0	8	2	5	11	5
1894	0	11	4	4	2	9	0	7	6	5	1	7
1895	0	14	11	3	18	9	0	6	7	5	0	3
1896	0	8	0	3	17	3	0	6	4	4	11	7
1897	0	11	5	3	15	6	0	6	4	4	13	3

onsidering the question of the expenditure on education in New Wales during past years, it should be borne in mind that the expenses contingent upon the necessity of obtaining efficient results in a count of such a vast extent and so sparsely populated were unavoidably gre School-houses had to be built, teachers required training, and the wh educational machinery had to be provided in many parts of the coun where there was, perhaps, only a denominational school, or, just as lik no educational establishment at all. To these initial expenses was d in a great measure, the relatively high cost of public education in the few years after the passing of the Act of 1880. In 1883, for instance, total cost per child in average attendance was not less than £9 5s. In 1888 this had been reduced to £5 6s. 5d., and since that year t has been a further decrease to £4 13s. 3d. It may be expected the cost will not at any ti[illegible]tly exceed the present figures, a schoolhouses have been bui[illegible] wit[illegible]lue regard to the increase in number of scholars which must be anticipated in a young, pro ing, and growing colony. Most of the school-buildings, too, ar a character that would do credit to the most advanced countri the world, the greatest care having been taken to embody all improvements which the experience of centuries has suggested in communities.

The following figures, showing the gross cost of each child in ave attendance at the public schools of the seven colonies in 1897, excl of the expenditure on buildings, disclose the fact that in New S Wales the cost is less than in Western Australia and Victoria:—

	Cost per child in average attendance.		
New South Wales	**£4**	**1**	**10**
Victoria	**4**	**5**	**8**
Queensland	**3**	**15**	**7**
South Australia	**3**	**4**	**2**
Western Australia	**4**	**12**	**5**
Tasmania	**2**	**1**	**2**
New Zealand	**3**	**18**	**0**

It is satisfactory to note that the average cost is lower th Victoria, especially when it is borne in mind that the smaller e of the territory of the latter colony, and the greater travelling faci offered by a railway system proportionately much larger, must necess reduce the cost of education. In South Australia settlement is co to certain districts in which the population is more compact, wh whole of the territory of New South Wales, if the extreme w excepted, may be regarded as everywhere settled—at least, to extent as to necessitate the extension of the public s throughout the greater part of the colony. But the s instruction is considered so pre-eminently important an ure has at all times expressed its readiness to make every and to spare no expense to render efficacious the system of education which it adopted in 1880.

ollowing table shows the gross expenditure by the State on education during the ten years ended 1897, and the annual per head of population:—

Total Amount.	Per head of population.	Year.	Total Amount.	Per head of population.
£	s. d.		£	s. d.
597,102	11 6	1893	715,219	11 10
635,509	11 11	1894	661,055	10 8
704,260	12 9	1895	701,827	11 1
769,565	13 5	1896	651,307	10 1
768,395	13 0	1897	692,395	10 7

ision of this expenditure under the two heads of "School " and "Maintenance and Administration" is shown below, and ction of the school fees received gives the net cost to the State ach of the ten years in question:—

nber of ools.	Gross enrolment of distinct Pupils.	Expenditure on school premises.	Expenditure on maintenance of Schools, including Administration, &c.	Total Expenditure.	School Fees.	Net State Expenditure.
		£	£	£	£	£
271	186,692	84,575	512,527	597,102	69,554	527,548
373	191,215	109,576	525,933	635,509	72,318	563,191
423	195,241	150,441	553,819	704,260	71,827	632,433
457	205,673	191,374	578,191	769,565	75,913	693,652
502	210,641	157,679	610,716	768,395	77,525	690,870
520	210,277	112,855	602,364	715,219	73,268	641,951
508	206,265	73,792	587,263	661,055	70,693	590,362
563	216,396	104,397	597,430	701,827	73,320	628,507
574	221,603	56,752	594,555	651,307	74,866	576,441
577	226,157	84,909	607,486	692,395	73,684	618,711

l be seen that the amount directly contributed by parents their children's education is but a small proportion of the st. In 1897 the contributions of the parents came to a sum less by £1,182 than that received in 1896, and less in average attendance than in any year shown in the table.

This een from the following statement, showing the gross net c State of each child in average attendance:—

Year.	Gross Expenditure.	Amount of Fees received.	Net Cost to State.
	£ s. d.	£ s. d.	£ s. d.
1888	5 6 5	0 12 5	4 14 0
1889	5 10 10	0 12 7	4 18 3
1890	6 0 9	0 12 4	5 8 5
1891	6 5 7	0 12 5	5 13 2
1892	5 15 10	0 11 8	5 4 2
1893		0 11 5	5 0 0
1894	5	0 10 10	4 10 9
1895	5	0 10 6	4 9 9
1896	4 11	0 10 6	4 1 1
1897	4 1	0 9 11	4 3 4

During the year 1897 free education was granted to 31,200 p equal to a percentage of 13 of the oss enrolment of distinct chil It was explained by the Minist his Annual Report that deb the amount of £2,557 were can ed during the year.

In accordance with a design contemplated, savings' banks opened during 1887 in connection th the public schools of the co At the close of 1897 there were banks in operation, as comp with 639 at the close of 1896. The deposits for the year amount £12,990, and the sum withdrawn was £12,257. The total amou the credit of the school banks on the 31st December, 1897, was £7, as compared with £6,671 at the end of 1896, and £6,310 at end of 1895. The object aimed at in establishing these banks inculcate practically the principles of economy while yet the min the children are susceptible of deep impressions. A systematic tra for this purpose is a thing to be desired in every public school, in to engender habits of thrift amongst the children, to indoctrinate as to the uses and effects of money that are ulterior to imme gratifications, and to make them recognise and calculate upon p and degradation as the natural results of waste and improvidence.

PRIVATE SCHOOLS.

The attendance at private schools greatly increased after drawal of aid from the denominational schools which had be control of the Education Department. Many of these ceased to exist immediately on the withdrawal of St children by whom they had been attended were transfe the ordinary public schools of the colony. Some of the schools, er, were still maintained, chiefly those connected with the Roman ic Church, and thenceforth appear in the returns as private s.

w will be found a statement showing the number of private s in the colony during each of the ten years 1888 to 1897, with aching staff and number of scholars enrolled :–

r.	Schools.	Teachers.	Scholars.	Year.	Schools.	Teachers.	Scholars.
8	679	1,854	40,164	1893	782	2,778	45,401
9	700	1,884	41,625	1894	863	2,966	51,016
0	697	2,393	42,612	1895	884	2,945	51,651
1	704	2,601	45,018	1896	893	3,087	53,967
2	719	2,717	45,747	1897	948	3,162	56,143

948 schools open during 1897 may be divided into the following :—

Classification.	Schools.	Teachers.	Scholars.
Undenominational	593	1,369	14,535
Roman Catholic	296	1,481	36,675
Church of England	50	228	3,885
Presbyterian............	3	42	235
Wesleyan	2	28	266
Congregational............ ..	1	2	40
Lutheran	1	1	40
Hebrew	1	5	385
Seventh Day Adventist ...	1	6	82
Total	948	3,162	56,143

a few of the schools returned as undenominational are religious s, though no definite form of religious opinions is inculcated therein. tinctly religious schools, those of the Roman Catholic Church comthe great majority, numbering 83·3 per cent. of professedly inational schools, and including 88·1 per cent. of the scholars ed therein. On the withdrawal of State assistance from denomial schools in 1882, there were in operation under the Department ucation, 75 Roman Catholic Schools, attended by 16,595 pupils; there were also some unassisted schools connected with this Church, ich statistics were not available. In 1888 the number of schools creased to 247, with an enrolment of 27,172 pupils; while in the number had grown to 296, with an enrolment of 36,675. The

table given below shows that during the last ten years the record i
of continuous progress :—

Year.	Schools.	Teachers.	Scholars on Roll.			Average Attend	
			Males.	Females.	Total.	Males.	Females.
1888	247	916	12,535	14,637	27,172	10,010	11,799
1889	267	996	13,674	14,872	28,546	10,785	11,977
1890	244	1,112	13,021	15,531	28,552	10,206	12,225
1891	250	1,242	13,837	16,854	30,691	10,547	13,241
1892	243	1,268	13,973	17,244	31,217	10,820	13,292
1893	259	1,359	14,439	16,860	31,299	10,911	12,838
1894	285	1,453	16,044	19,106	35,150	12,352	14,813
1895	288	1,409	[illegible]	[illegible]	35,250	12,420	15,033
1896	293	1,527	[illegible]	[illegible]	36,552	12,967	16,004
1897	296	1,481	16,494	20,181	36,675	12,954	16,208

The Church of England is the only other religious body maintai
a considerable number of schools. During 1897 the schools conne
with this church numbered 50, and were attended by 3,885 pupils.
the end of 1882 there were in existence 42 Church of England Sch
with an enrolment of 11,927 children. The following table g
particulars of these schools during the past ten years :—

Year.	Schools.	Teachers.	Scholars on Roll.			Average Attend	
			Males.	Females.	Total.	Males.	Females.
1888	66	154	1,548	1,552	3,100	1,272	1,242
1889	47	115	1,353	1,302	2,655	1,065	999
1890	64	209	1,844	1,763	3,607	1,449	1,410
1891	47	185	1,917	1,417	3,334	1,475	1,037
1892	48	188	1,749	1,472	3,221	1,388	1,125
1893	47	178	1,504	1,334	2,838	1,204	932
1894	62	246	1,852	1,623	3,475	1,445	1,237
1895	50	204	1,614	1,421	3,035	1,299	1,084
1896	44	185	1,581	1,518	3,099	1,025	1,151
1897	50	228	1,910	1,975	3,885	1,459	1,500

HIGHER EDUCATION.

It has already been mentioned that the State has made provisio
higher education by the establishment of High Schools in the metr
and the principal centres of population. The curriculum of these sc
is of such a character as to enable students to complete the co
instruction the basis of which they acquired in the Public Schools,
if they so wish, to prepare themselves for the University examina
Admission to these schools is by examination only. There were
close of the year 1897 two High Schools for boys and three fo
The gross enrolment for that year was 228 boys and 288 girls,
a total of 516 pupils, as against 577 for 1896. The a
attendance in 1897 was 370 as against 392 for the p
During the last four years there has been a decrease of

rolment at the State High Schools, and of 34·8 per cent. in the ttendance. There is no doubt that the action taken in 1893 the quarterly fee from two to three guineas contributed to nt towards this reduction. During 1897, 76 pupils from the ools passed the junior, 12 the senior, and 61 the matriculation ions at the University, 26 of the matriculants qualifying at r, and 10 at the senior examinations.

r Public Schools, in which the subjects taught embrace, in to the ordinary course prescribed for Public Schools, such other s will enable the students to compete at the senior and junior minations, are also established. There were 99 of these schools ce at the end of 1897, with an enrolment of 71,795 pupils. It nt to recollect that these figures do not show the number of eceiving higher education. In the course of the year, 4 pupils or schools passed the senior, and 223 the junior examinations. n to these, 35 junior passes were obtained by Public Schools d as Superior.

em of scholarships and bursaries for boys and girls at State s been brought into operation. Twenty of each—ten for each available for education at State High, or Grammar Schools; rsaries for boys and four for girls are tenable at the University. er are awarded half-yearly, and the latter at the March matricuaminations, to the most proficient pupils, in cases where the re unable to defray the expense of the pupil's education. ndidates from the High Schools—3 boys and 4 girls—and s from Fort-street Model School were successful in obtaining at the University matriculation in 1897. For other State ips and bursaries 97 candidates were successful; 25 boys and btained scholarships for High Schools and Superior Schools; nd 16 girls obtained bursaries for High and Superior Schools; s obtained bursaries for the Sydney Grammar School.

ition to the various classes of Public Schools already mentioned, t several institutions of an educational character which receive l subsidy from the Government. The most important of these ney Grammar School, which is one of the principal schools of y. In 1897 the mean quarterly enrolment was 418, and the ttendance 401. This school receives an annual endowment State of £1,500. In 1897 the other revenue, derived from s and other sources, amounted to £7,387.

THE UNIVERSITY.

ear 1849 Mr. Wentworth presented a petition to the mixed Legisncil from certain shareholders of a proprietary school, known as ollege, praying for the appointment of a select committee of e "to consider the best means of carrying on the institution so rd the youth of the colony the means of obtaining instruction igher branches of literature and science." The committee

ADVANCES BY BANKS

Under the head of advances are included bills and promissory discounted, cash credits, and miscellaneous debts. The bulk of a made are secured by the mortgage of real estate or by the deposit deeds over which the lending institution acquires a lien ; the disco of trade bills does not amount to more than about 15 per cent. of the cash credits and overdrafts. The banking returns are in such a de form that an account of the nature of advances made, and the na security advanced against, cannot be given. The most inter summary that can be made is that which the following table suppl

Year.	Advances.	Ratio of Advances to Deposits.	Amount of Advances per Inhabitant.
	£	per cent.	£ s. d.
1860	5,780,700	111·9	16 17 6
1865	7,100,361	121·8	17 15 0
1870	7,814,116	127·9	15 18 11
1875	12,483,713	91·4	21 17 1
1880	17,210,205	96·2	23 12 4
1885	31,344,909	117·4	33 16 1
1890	43,009,559	121·3	39 0 8
1891	45,068,914	126·4	39 8 3
1892	44,135,729	124·1	37 7 2
1893	40,024,354	124·5	33 0 4
1894	37,378,947	125·4	30 4 2
1895	35,707,153	116·6	27 18 10
1896	35,116,696	117·7	27 1 3
1897	35,697,494	120·6	26 19 5
1898	34,403,700	115·2	25 11 1

The useful purpose which the banking system serves may be realised from the foregoing statement. The period extending fro right on to 1885 was, on the whole, one of trade prosperity, and th out those years the ratio of advances to deposits ranged betwee 117 per cent. Since 1885 New South Wales, in common w other colonies, has suffered more or less from depression, and th of advances to deposits has stood considerably higher, viz., from 126 per cent.

DEPOSITS IN BANKS.

The total amount of money deposited with the thirteen bank ating in New South Wales in the middle of 1898 was appro £103,837,677, and of this sum £29,852,711 was received locally excess of the total over local deposits was employed in the

In 1861 it was directed that, in addition to the ordinary sixteen Fellows, there should be not fewer than three nor more than six *ex-officio* members of the Senate who should be Professors in such branches of learning as the Senate should by any by-law select; and such Professors and other public Teachers and examiners and every superior officer declared to be such by the by-laws should be a member of the University, with the same rights and privileges in respect to the election of new Fellows as were enjoyed by persons holding the degrees of M.A., LL.D., and M.D. In 1881 *Ad eundem* degrees, with equal privileges, were authorised to be conferred; and Bachelor of Arts of three years standing were empowered to vote at new elections of Fellows. In 1884 the Senate's powers as regards teaching and degrees were extended by enabling it to give instruction and grant degrees or certificates in all branches of knowledge with the exception of Theology or Divinity, subject to a proviso that no student should be compelled to attend lectures or to pass examinations in Ethics, Metaphysics, or Modern History; and by the same Act it was directed, in accordance with a previous by-law of the Senate, that the benefits and advantages of the University should extend in all respects to women equally with men.

The number of persons entitled to vote at the elections of new Fellows reached 100 in 1872, whereupon the Senate passed by-laws in respect of such elections, and styled the electoral body "Convocation." This body, including the additions made by the several amending Acts, and the heads of affiliated colleges, who had been declared to be superior officers of the University under the Act of 1861, now numbers upwards of 800.

The public endowment of the University stood at £5,000 per annum until 1880, when £1,000 was added for assistant lectureships; but in 77 a bequest of the value of £6,000, producing about £300 a year, was made by Mrs. Hovell, widow of the explorer of that name, for instruction in Geology and Physical Geography, and this sum, together with fees, enabled the Senate to divide the Chair of Chemistry and Experimental Physics into two, to the first of which Geology and Physical Geography were attached. In 1882 a further sum of £5,000 was voted to enable the Senate to establish Schools of Medicine and Engineering, and to give some further help to the original Department of Arts. Medical and Engineering Professors and Lecturers, a Professor of Natural History, and some small lectureships in Arts were created: but this sum was soon found inadequate for the intended purposes, and was increased to £7,900, inclusive of the £1,000 granted in 1880. Allowances were also made for apparatus, and a sum of £2,000 per annum granted for evening classes in Arts. In 1893 the Government endowment amounted to £13,000, and the special grants to £5,695. Since that year the State aid has been largely reduced, and in 1896 the endowment was £9,000, while the special grants totalled £2,000. Principally out of the endowment for Evening Classes, a system of Extension Lectures to non-matriculants was commenced in 1882, first in it at current account. The current accounts have increased by one million since 1894, while the total deposits have remained stationary since that period.

The interest offering for fixed deposits has now fallen to 3 per for sums deposited for twelve months; for six months' depos interest allowed is at the rate of 1½ per cent. The practice of allo interest on money fixed for terms of less than six months was tinued in May, 1894. The rates quoted, which were fixed on the March, 1896, are much the lowest that have been offered since were first opened for business, and money equal to their requirem freely offered. The following is a statement of the average rat twelve months' deposits from 1860 onwards. The figures of the five years do not include interest payable on deferred depo reconstructed banks:—

Year.	Bank Interest on Deposits for twelve months.	Year.	Bank Interest on Deposits for twelve months.
	per cent.		per cent.
1860	5	1891	4¾
1865	6	1892	5
1870	5	1893	4½
1875	5½	1894	4¼
1880	5	1895	3½
1885	5	1896	3
1890	4½	1897	3

Under normal conditions the annual rate of interest paid deposits is uniform for all banks; but some of the institution have undergone reconstruction have not been in a position the rates on a large proportion of the deposits, so that they are the ordinary market rate of 3 per cent. on deposits recei reconstruction, while rates varying from 2 to 5 per cent. paid on the extended deposits. The reconstructed banks have release their extended deposits at any time on giving the necess of their intention to do so, and the deposits when renewed accepted at the ordinary or reduced rate.

The liability to depositors of the reconstructed banks at of suspension was £58,914,585; but up to the middle £32,254,706 of the deposits had been liquidated, £2,594,7 into preferential share capital, and £6,792,861 into inscribed petual stocks or debentures, apart from £750,000 inscribed stoc ıat no religious catechism or formulary which is distinctive of lar denomination shall be taught, and that no attempt shall be ach students to any particular denomination. When the opened in a house at Glebe Point, leased until the permanent ‹ere completed, the students numbered four. The present 'ere opened in the early part of 1894, and at the close of that were eight students, while in 1897 there were 13. There r, accommodation for twenty-six resident students. The t granted £5,000 towards the erection of buildings, but affords ent to the college, though it pays the salary of the Principal. ›nations have been made to the University for the use and tudents. Among the first were gifts of £1,000 each from ɩs Barker and Sir Edward Deas-Thomson, represented by h are now of twice that value. Many others followed, and 000 has been presented up to the present date, exclusive of :h have been exhausted by award, and irrespective of ı value. About £10,000 of this is still in suspense on intervening life estates to the widows of testators. Besides a sum of £30,000 was left by the late Mr. Thomas Fisher for and £6,000 was given by the late Sir William Macleay orship of the Natural History Museum, presented by him to sity, and for which the Government have erected a suitable There have also been bequests of property other than money ıated value of £51,000 up to the present time.

.l, the late Mr. John Henry Challis left his residuary estate 'ersity, subject to certain annuities. In December, 1890, the nded over to the University the major part of the Australian .he estate, consisting of £199,362 in investments and £3,228 e. Under this bequest the Senate have created new Chairs in :n Literature, History, Logic and Mental Philosophy, Anatomy, g, and Biology, to which they have given the testator's name. l and Challis bequests constituted, until the end of 1894, sources of the University for actual education other than the owments. During 1896 Mr. P. N. Russell, of London ›f Sydney), devoted £50,000 to the purpose of endowing a 'ngineering.

hing-staff, now that all the Challis Chairs are filled, consists of rofessors, twenty-seven Lecturers, and seven Demonstrators. :s over which Professors preside are Greek, Latin, Mathema- stry, Physics, Geology and Physical Geography, Physiology, Engineering, Modern Literature, Logic and Mental Philosophy, aw, and History. The Lecturers deal with Geology and eography, Metallurgy, Latin, Modern Literature, Mathematics, re, Surveying, Mining, Mechanical Engineering and Drawing, and Practice of Medicine, Principles and Practice of Surgery, Diseases of Women, Materia Medica and Therapeutics, Medical Jurisprudence and Public Health, Clinical Medicine, Clinical Surgery, Psychological Medicine, Ophthalmic Medicine Surgery, Equity, Probate, Bankruptcy, and Company Law, La Procedure (including Evidence and Pleading), Law of Status, (Obligations, and Crimes. There are also Tutors in Medicine Surgery, and a Tutor to the female students. The Demonstrator appointed in Chemistry, Physiology, Anatomy, Biology, Geology Physical Geography, and Physics.

From the foundation of the University to the end of 1897, 1,559 de of various kinds have been conferred, the highest number bei in any one year being 123 in 1894. The degrees conferred includ M.A., 898 B.A., 23 LL.D., 64 LL.B., 38 M.D., 119 M.B., 83 Mast Surgery, 26 B.Sc., 3 Masters of Engineering, and 46 Bachelo Engineering. During 1897 the degrees conferred (including *ad eun* were M.A. 3, B.A. 47, LL.B. 7, M.D. 1, M.B. 11, Ch.M. 8, B.Sc. 2, 9. The number of matriculated students increased from 34 in 18 424 in 1897.

Examinations, corresponding to the middle-class examinations o English Universities, are held every year. These examinations proved highly popular, attracting no less than 2,305 candidates in of whom 173 were seniors, and 2,132 juniors. Since that year, how the number of candidates has greatly fallen off; and now the Public Service Board have instituted competitive examination appointments to the public service, the candidates presenting selves for examination have been still further reduced.

Year.	Students attending Lectures.	Matriculated students.	Attending extension Lectures.	Public Examinations.			
				Number of Seniors.		Number of Ju	
				Examined.	Passed.	Examined.	P
1876	58	34	...	53	40	356	
1877	61	23	...	63	38	303	
1878	62	24	...	58	41	364	
1879	83	58	...	76	64	333	
1880	76	64	...	66	54	381	
1881	81	80	...	48	36	392	
1882	97	101	...	57	43	398	
1883	128	85	...	57	36	473	
1884	203	142	...	65	48	563	
1885	206	115	...	84	73	645	
1886	203	122	137	107	83	858	
1887	215	132	329	125	87	834	
1888	250	130	403	141	110	834	
1889	275	210	327	115	90	1,085	
1890	409	301	447	129	101	1,172	
1891	532	478	298	143	110	1,729	1,
1892	598	540	528	173	134	2,132	1,
1893	586	539	514	176	127	1,853	
1894	592	522	934	137	103	1,494	
1895	506	487	727	142	112	1,398	
1896	454	438	396	142	108	1,481	
1897	455	424	376	119	101	1,471	

minations for the admission of articled clerks were instituted in in compliance with a rule of the Supreme Court, and in 1897 rere 12 successful candidates.

w is given a statement showing the amount derived by the sity from each of the principal sources of revenue from 1876, ie total expenditure during each year:—

r.	Receipts.					Expenditure.
	Government aid.					
	Endowment.	Grants for apparatus or other special purposes.	Lecture fees.	Other sources.	Total.	
	£	£	£	£	£	£
6	5,000	....	403	100	5,503	5,877
7	5,000	....	334	100	5,434	5,434
8	5,000	1,168	324	100	6,592	7,748
9	5,000	114	476	100	5,690	5,746
0	5,000	1,500	457	100	7,057	6,795
1	5,000	1,000	706	100	6,806	6,227
2	10,000	2,964	1,080	100	14,144	10,614
3	12,000	2,343	1,266	120	15,729	15,381
4	12,000	3,500	2,207	170	17,877	16,198
5	12,000	4,500	2,479	385	19,364	20,094
6	12,000	5,500	2,600	323	20,423	20,765
7	12,000	4,918	2,819	308	20,045	20,811
8	12,000	7,099	3,022	385	22,506	21,867
9	12,000	6,800	5,667	807	25,274	28,030
0	13,900	4,734	5,385	293	24,312	26,075
1	13,900	4,400	7,262	11,694	37,256	36,649
2	13,900	4,200	7,647	11,843	37,590	40,083
3	13,000	5,695	7,912	11,921	38,528	39,769
4	11,000	2,200	7,700	12,590	33,490	33,539
5	9,500	2,000	8,445	11,462	31,407	31,651
6	9,000	2,400	8,171	11,923	31,494	31,557
7	9,000	2,000	7,899	13,125	32,024	32,787

extensive addition to the University's magnificent buildings has iade for the use of the School of Medicine. It provides the most te accommodation for students desiring to follow the profession licine and surgery; and the Prince Alfred Hospital, erected, as stated, on the University grant, affords them the necessary means ly. During the year 1897 there were 147 undergraduates, of 12 were ladies, in the Medical School—a very fair number con- g that this school was not established until 1883, and then com- l with only four students. A laboratory for the Department of s has also been erected, and is replete with every means of illus- ; the teaching of physical science. In March, 1890, a Department of Chemistry and its adjuncts were opened. The accommodation provided includes lecture halls and four laboratories, besides other facilities. One of the laboratories is used in connection with the School of Mines, which was opened early in 1895 for the purpose of imparting instruction in geology (including physical geography and palæontology), mineralogy, and practical mining work. The buildings for the School of Mines cost upwards of £4,000, and more than £1,500 was expended on fittings. In 1897 there were 11 students in attendance at this school.

DENOMINATIONAL HIGH SCHOOLS AND COLLEGES.

All the principal religious bodies provide high schools and colleges where students may be educated according to the precepts of their various beliefs, and prepared to compete for University honours or the various professions which they may adopt. Evidence of the progress of superior denominational education in the colony may be seen in the magnificent college buildings which surround the city, among which may be cited Newington College, the colleges of the Marist Brothers and the Jesuit Fathers at Hunter's Hill and Riverview, the old-established King's School at Parramatta, the North Sydney Church of England Grammar School, the Scots' College, the Presbyterian Ladies' College at Croydon, and a host of other first-class establishments erected under the patronage of the various religious bodies.

TECHNICAL EDUCATION.

Public attention was so strongly directed in the years which followed the great world exhibition of 1851 to the necessity of providing the artisan classes, and the people generally, with the means of obtaining a scientific knowledge of the various handicrafts, that technical schools sprang up in various parts of England, some being under the direct patronage of the State, while others were founded by the wealthy trade societies or guilds of the great English cities. The excellent results following the establishment of these schools could not fail to attract attention in the colonies, where a sound and practical knowledge of the manual arts is of paramount necessity. The foundation of the New South Wales Technical School was due in great measure to the efforts of a few gentlemen connected with the Sydney Mechanics' School of Arts, and as far back as 1873 it was decided to establish a Technical College affiliated to that institution, with the object of improving the scientific knowledge of Australian artisans. In the year 1878 a sum of £2,000 was granted by Parliament towards the organisation of a Technical College, and for five years the work of the institution was carried on in connection with the School of Arts. In 1883, however, a board was appointed by the Government to take over its management, and Technical College became thenceforth a State institution. Towards end of 1889 the Board was dissolved, and the Technical College es-

the direct control of the Minister of Public Instruction. The
ition is now well established, and its work is already being felt
ppreciated, whilst the future gives every promise of still greater
ness. The College is housed in a fine building specially erected
Government at Ultimo, Sydney, and is provided with workshops
l necessary tools and apparatus.

course of instruction, under the present constitution of the Col-
omprises classes in agriculture, art, architecture, chemistry, geology
ineralogy, mechanical engineering, physics, sanitary engineering,
cal engineering, lithography and photo-lithography, mine survey-
etalliferous mining, and wool sorting and other training in con-
n with sheep and wool; and these classes are subdivided as may
ranted by circumstances.

College is open to both male and female students, and in 1897
were 181 classes in operation, of which 87 were in Sydney and
s, 79 in various country towns, and 15 in connection with public
s. The teaching staff consisted of 12 lecturers in charge of depart
5 resident masters in charge of branch schools, 40 teachers,
istant teachers, and 17 teachers remunerated by fees only. The
ent of students amounted to 7,658 in all, 4,103 of whom were
ney and suburbs, and 3,555 in the country, while 912 represented
olment of scholars from public schools. The number of individual
ts was 5,848, being an increase of 452 as compared with the number
96. The average weekly attendance was 3,983. At the annual
nations 2,702 students presented themselves, of whom 1,923
—a proportion of 71·2 per cent. New Technical College buildings
pened at Newcastle in February, 1896; and a Technical College
resent in course of construction at Bathurst, and will be ready for
eption of students at an early date.

1897 the State expenditure on technical education amounted to
58. Salaries (administrative) of the Sydney Technical College
Branches absorbed £1,358. Lecturers and teachers received
3; caretakers and cleaners, £719, &c. During the year £3,999
id for salaries and contingencies in connection with Technological
ms. In addition, an amount of £5,357 was expended from the
Vote on erection of buildings, and £105 consisted of London pay-
by the Treasury. The sum of £3,116 was received as fees from
in addition to a Parliamentary grant of £19,752. The cost to
ate per student, which in 1889 reached £6 15s. 4d., had in 1897
educed to £2 13s. 10d.

REFORMATORIES AND INDUSTRIAL SCHOOLS.

ddition to the purely educational establishments, the State main-
everal reformatories and industrial schools. For girls there are the
rial School at Parramatta and the Shaftesbury Reformatory at
Head; and for boys, the nautical schoolship Sobraon and the

drought of 1897–8 precluded any large additions to the profi over, four of the institutions showed an absolute loss on the tions of the previous twelve months, so that the recovery further evidence of the returning prosperity of the people.

Intimately connected with the question of profits is that expenses, and it must be confessed that the cost of working institutions in Australasia is undoubtedly large. This is par the wide and sparsely populated area over which operations on, and partly to the class of business in which banks are eng following is a statement of the cost of management of the sev enumerated :—

Bank.	Expenses of Managem months, 1897-
	Total.
	£
Bank of New South Wales	Not availab
Commercial Banking Company of Sydney (Limited)	
Australian Joint Stock Bank (Limited)	
City Bank of Sydney	
Commercial Bank of Australia (Limited)	91,781
National Bank of Australasia (Limited)	169,023
Queensland National Bank (Limited)	70,556
Bank of North Queensland (Limited)	10,311
Bank of New Zealand	Not availab
Bank of Australasia	221,036
Union Bank of Australia (Limited)	232,672
London Bank of Australia (Limited)	77,080
English, Scottish, and Australian Bank (Limited)	82,309

It will be observed that the expenses of working the four and the Bank of New Zealand are not shown in the stat given. These banks do not disclose even to their shareholders of their business, so that the reference to the cost of bankin is seriously incomplete ; but taking such banks as are enum guide to the whole of the institutions, the total expenses of m of the thirteen banks which have offices in the colony may b for the year 1897–8 at £1,631,200.

The following statement may be taken as approximately

Total trading assets	£130
Capital and reserves	22
Gross earnings, less reserve for bad and doubtful debts, and rebate on bills current	4
Gross expenditure, including interest	3
Net earnings	

of their term, but are apprenticed to persons of well-known character, and have every opportunity of becoming respectable members of the community. That they do become such is evidenced by the fact that very few lads apprenticed from the Sobraon lapse into crime and find their way into gaol. When such, however, does happen, the circumstance becomes widely advertised, and an impression contrary to fact is thus produced.

SCIENTIFIC SOCIETIES, ETC.

In a young country such as New South Wales, where most of the people are engaged in the development of its material resources, the existence of a leisured class, or one devoted to the pursuit of science, is hardly to be looked for. Nevertheless it is satisfactory to find that the higher aims of science are far from being neglected. As far back as the year 1821, a scientific society under the title of the Philosophical Society of Australasia was founded in Sydney, and after experiencing many vicissitudes of fortune was transformed in 1866 into, and afterwards incorporated under the title of, the Royal Society of New South Wales. The society is now in a flourishing condition, counting amongst its members some of the most eminent men in the colony. Its objects are the advancement of science in Australia, and the encouragement of original research in all subjects of scientific, artistic, and philosophical interest, which may further the development of the resources of Australia, draw attention to its productions, or illustrate its natural history. The proceedings include papers of the greatest interest on important scientific questions, especially those whose solution is of Australian interest.

The study of the botany and natural history of Australia has attracted many enthusiastic students, and the Linnæan Society of New South Wales was established for the special purpose of furthering the advancement of these particular sciences. The society is housed in a commodious building at Elizabeth Bay, one of the most beautiful spots near the city, and possesses a library and museum. It was liberally endowed by Sir William Macleay, who, not content with being one of its most munificent supporters was also an indefatigable worker in the field of science. The society's proceedings are published at regular intervals, and contain many valuable papers, together with excellent illustrations of objects of natural history.

Among the other scientific societies are the New South Wales Zoological Society, inaugurated in 1879; a branch of the British Medical Association, founded in 1881; a branch of the British Astronomical Association, whose first meeting was held in 1895; and a branch of the Anthropological Society of Australasia. The Australasian Association for the Advancement of Science, and the Royal Geographical Society of Australia, also have branches in New South Wales as well as in the other colonies.

The Sydney Observatory is numbered among the institutions o scientific and educational character which the colony liberally suppo Situated in a commanding position, it is admirably fitted for purpose it is intended to serve. The present building was erected 1856 at the instance of Sir William Denison, then Governor of colony, who took a great interest in scientific pursuits. The Governm Astronomer has under him a complete staff of assistants, and during year 1897-8 a sum of £3,995 was expended in connection with the i tution. Meteorological observations have received special attention befits such an important subject in a country whose prosperity depend much upon climate. When the present Astronomer took office in 1 there were in the colony only six stations, and observations on climate, rainfall, and other meteorological phenomena were necess very limited in character. At the end of 1897 the number of stat had been increased to 1,607. Rain gauges have also been establi at most of the sheep and cattle stations of the interior, with a r which is highly satisfactory. The light thrown on the true characteri of the climate, especially of that part of the colony remote from sea coast, has tended to modify the notion long current as to its u ness for agricultural as well as pastoral settlement.

PUBLIC LIBRARIES.

The Public Library of New South Wales was established, under designation of the Free Public Library, on the 1st October, 1 when the building and books of the Australian Subscription Li were purchased by the Government. The books thus acquired fo the nucleus of the present library. The number of volumes origi purchased was about 16,000, and on the 31st December, 1897, they been increased to 119,782, including those in the lending branch or to country libraries. The lending branch was established in 187 meet a growing public want, and under the present system any p may, on the recommendation of a clergyman, magistrate, or responsible person, obtain under certain simple regulations the of any of the works on the shelves, free of charge. The scope of institution was further extended by the introduction of a syste which country libraries and Mechanics' Institutes may obtain on works of a select kind, which in many instances would be too expe for them to purchase on account of the slender funds at their dis Under this system, boxes are made up containing from 60 to 100 b and forwarded to the country libraries on application, to be return exchanged within four months. This system was initiated in Au 1883, and has been carried on successfully ever since. In the cou the year 1897, 14,852 volumes were forwarded to 99 institutions, of which were at considerable distances from the metropolis. A connection with the despatch and return of the books are the State, and the system in vogue in New South Wales liberal of its kind in existence.

rence department of the Public Library of New South Wales ',171 volumes, and the lending branch 26,166, while there are volumes for country libraries to be lent under the above-system, the total number of books and pamphlets, the this institution, being 119,782 classified as under :—

ynopsis of Classification.	Reference Department.	Lending Branch.	For Country Libraries.	Total.
phy, Science, and the Arts	13,131	4,228	1,414	18,773
ology, Antiquities, and Mythology....	7,448	3,709	1,225	12,382
Correspondence	5,610	4,225	1,548	11,383
pography, Voyages and Travels, etc. ..	7,131	3,710	1,161	12,002
Serial Literature	27,786	....	59	27,845
Political Economy, Social Science, etc	6,130	1,232	203	7,565
land Mental Philosophy, and Education	5,836	1,542	167	7,545
Drama..............................	3,114	964	151	4,229
ure, Philology, and Collected Works *	5,604	6,556	513	12,673
ence	4,065	....	4	4,069
....	1,316	....	....	1,316
Total......	87,171	26,166	6,445	119,782

* Including 3,240 volumes of Fiction.

ılarity of the Public Library of New South Wales is clearly the number of persons availing themselves of the privileges ffords. The increase has been very regular, rising from 1888 to 256,318 in 1897, 81,431 of which were visits to the nch. The following table shows the number of visits paid ary during the last ten years. It should be noted that the not be taken as in every sense a test of either the popularity ary or the reading habits of the community, as a shower of the habitués of the surrounding parks to seek shelter which veniently afforded by the Library and Art Gallery.

....	149,425	1893	216,089
....	132,983	1894	209,099
....	155,822	1895	237,170
....	173,205	1896	255,058
....	197,255	1897	256,318

he 256,318 visits recorded for 1897, no less than 154,669 were e newspaper room. Although the lending branch contains volumes, the total number of times when books were issued year was not less than 93,057, and the number of persons emselves of the privilege of borrowing was 5,955, so that on each book was taken four times, and each person to whom a permit was granted used nearly sixteen volumes during the year. A usual, works of fiction were extensively read, each of the 3,240 nove in the branch having been issued nine times during the year. Th number of volumes of each class taken out was as follows :—

Synopsis of Classification.	No. of volumes
Natural Philosophy, Science, and the Arts	10,764
History, Chronology, Antiquities, and Mythology	9,356
Biography and Correspondence	8,294
Geography, Topography, Voyages and Travels, etc.	12,752
Jurisprudence, Political Economy, Social Science, etc.	1,756
Theology, Moral and Mental Philosophy, and Education	3,312
Poetry and the Drama	2,605
General Literature, Philology, and Collected Works	14,311
Prose Fiction	29,907
Total	93,057

During 1886 and 1887 considerable extensions were made to premises of the Public Library of New South Wales, which had beco much too small for the accommodation of the public, and the pro housing of the books. It was at length decided to pull down the building in Macquarie-street, and a contract was made about the mid of 1887 for rebuilding a large portion of the Library at a cost of £10,4 The new building was opened to the public in April, 1890: and Public Library of New South Wales is now one of the most conveni in Australia.

The institution forms a separate department, under the control of Minister of Public Instruction. Its cost to the State during 1897 as follows :—

	£
Books, Periodicals, and Binding	2,378
Salaries	4,882
Miscellaneous—Cleaning, Freight, Repairs, &c.	306
Total	7,566

Besides the Public Library, which is situated in Sydney, there are sma libraries established in the principal population centres throughout colony. These libraries may be broadly classed under two heads—Scho of Arts, receiving an annual subvention in proportion to the amount monetary support accorded by the public; and Free Libraries, establi in connection with municipalities. Those of the former class are far more numerous. Under the provisions of the Municipalities Act of 1 any municipality may establish and maintain a Free Library, and wh such is done the Council of the Municipality is entitled, for the purch

to the sum of £200 if the library is available for the use of a
ın of 1,000, or to £100 where the population to whom the library
accessible reaches 300 persons. The number of public libraries
olony is 324, and these contain about 510,000 volumes. In
to these, there are a large number of private circulating
which are extensively patronised.

National Art Gallery.

ational Art Gallery was opened in June, 1876, in connection
New South Wales Academy of Art (established in 1871). It
ened as the National Art Gallery in 1880 in temporary buildings
ydney Botanical Gardens, and is now situated in the Outer
in a convenient and well-lighted building, which has received
lditions, but is yet incomplete. The Gallery contains an excellent
ı of paintings and statuary, comprising some of the most famous
the best modern artists of the old world, and includes several
able gifts from private persons. The collection of Water Colors
ered to be the finest out of England. It is estimated that the
alue of the contents of the Gallery is not less than £100,000,
other national institutions of New South Wales, the Gallery is
Sundays as well as week-days, and on Sundays and public holi-
attendance is especially numerous. During 1897 the Gallery
ted by 196,504 persons, the average Sunday attendance being
ıd on week-days, 593. Under certain regulations art students
itted to the Gallery for the purposes of study, and on the 30th
98, the total number registered was 266. In 1894 a system of
hanges between the Art Galleries of Sydney, Melbourne, and
was introduced. By this arrangement pictures are sent from
o Melbourne and Adelaide, and others are received from the
eries in those cities in exchange. That the interests of art have
l under this system is unquestionable. Another excellent scheme
iated in July, 1895, by which collections of pictures belonging
rt Gallery and the Art Society are made up and sent to the
l country towns for temporary exhibition. Up to the end of
total expenditure on the National Art Gallery was £108,953,
the sum of £84,424 had been expended on works of art. The
nents during 1897 were :—

	£
orks of art	1,026
aintenance, including freight, frames, repairs, and insurance	841
laries	1,266
Total cost to the State	3,133

colony, are required to furnish quarterly statements of the
and liabilities of their local business in the same manner as bank
panies. Of the 545 companies in operation at the middle of
17 were returned as receiving money on deposit, in addition
company registered under the Victorian Act; the remaining
with an exception here and there, conduct their business
scribed capital alone. The 545 companies referred to above
clusive of 4 companies registered under section 8, the
members being limited by guarantee; 2 companies with
liability, under sections 9 and 224; and 15 companies, not
registered under section 54.

The registrations under the Companies' Act for the five
1897 were:—

Registrations.	1893.	1894.	1895.
New Companies registered	73	90	77
Old Companies incorporated by Act of Parliament, registered under clause 224 of the Act, for purpose of winding-up	4	....	....
Companies wound-up	78	57	73
Declarations, statements, etc., that certain Companies have been defunct	156	57	119
Amount of fees received £	1,123	1,038	1,034

In the number of companies shown in the above table as
included several defunct companies which have been recons
in the number shown as having become defunct during the
are included many which ceased operations in previous
notifying the Registrar at the proper time; still, after
necessary allowances on these points, the five years mentio
unusually large number of winding-up notices.

During 1890 most of the deposit, land, building, and inve
panies were presumed to be in a flourishing condition. The
to shareholders were very large, and the rates allowed on
considerably in excess of those current in the banks of issue.
have been expected, the high interest offered was too tempti
be resisted by a section of the investing public, and large
placed in these institutions with the utmost confidence that
be available when required. This confidence, unfortunately
be, in many instances, unmerited. The shrinkage of land
the depreciation of real estate generally, put an end to
institutions working on speculative lines, as well as to
companies that were conducted on reasonable principles.
1891, three of these institutions suddenly suspended paym
were followed within a short time by others, several of
placed in liquidation; while a considerable number of
institutions are now carrying on their business under the
the Joint Stock Companies Arrangement Act of 1891,

ed to afford relief to *bona fide* institutions which, through no fau
own, became embarrassed. This Act expired on 1st January, 1
Parliament extended its operations until the 1st January, 1899.
he liabilities, assets, and paid-up capital of the seventeen dep
panies, for the quarter ended December, 1898, were as follow :—

Companies.	Number.	Liabilities (exclusive of Liabilities to Shareholders).			Assets.			Paid Cap
		Deposits.	Other Liabilities.	Total.	Landed Property.	Other Assets.	Total.	
		£	£	£	£	£	£	
[illegible]ment	14	442,030	485,208	927,238	1,268,336	487,611	1,755,947	99
[illegible]	3	338,573	623,926	962,499	899,791	3,372,775	4,272,566	2,757
Total	17	780,603	1,109,134	1,889,737	2,168,127	3,860,386	6,028,513	3,751

The difficulties into which the deposit companies fell may for
st part be attributed to their practice of borrowing money for s
ods, and locking it up for long terms. Besides this, howe
y so-called building societies indulged in speculative land
es, and having retailed the land at enhanced prices, with paym
extended periods, proceeded to divide the presumed profits am
shareholders, with a result that might easily have been fores
In many cases the purchasers, after paying a few instalments tow
price, left the allotments on the hands of the companies, wh
icipated profits were therefore purely visionary, and whose divide
re really never earned, but, in many instances, were merely ta
m the deposits.

BENEFIT BUILDING AND INVESTMENT SOCIETIES.

According to the provisions of the Friendly Societies Act of 1
number of persons may form themselves into a Benefit Building
estment Society for the purpose of raising money by subscriptio
able members to erect and purchase dwellings, etc., which must
red to the society by mortgage until the amount of the shares
en fully paid. These institutions, as previously mentioned,
ablished solely for the benefit and advantage of the subscrib
mbers, and their operations are, as a rule, confined to the subsc
ns. There were, however, 9 institutions in 1897 receiving mo
deposit from the general public, the aggregate amount of which
1 9,335. At the close of 1897 the Benefit Building and Investm
cieties which had been registered under the Friendly Societies
mbered 129, of which only 31 were in operation at that date. Of
er institutions, some had ceased to exist through being Terminat

The number of persons entitled to State aid during 1897 wa clergymen of the Church of England, 10 Roman Catholics, 4 terians, and 5 Wesleyan Methodists.

At the Census of 1891 the number of adherents to each of the nations, with the clergy registered for the celebration of marriages given below. The table also shows the average number of ad to each denomination compared with the number of clergymen i service:—

Denomination.	Clergy.	Adherents.	Pr of ad d
Church of England	333	502,980	1
Other Episcopalians	1	95	
Roman Catholic	295	286,895	
Greek Church	......	253	
Catholic (not defined)	......	16	
Presbyterian Church of New South Wales	146	106,464	
Presbyterian Church of Eastern Australia	6	2,154	
Other Presbyterians	4	772	
Wesleyan Methodists	133	87,516	
Primitive Methodists	29	20,354	
Other Methodists	5	2,242	
Baptist Union of N. S. Wales	27	12,344	
Other Baptists	5	768	
Congregational	65	24,089	
Lutheran	5	7,950	1
Bible Christians	9	2,336	
Church of Christ	5	2,042	
Christian Brethren	......	1,036	
Unitarian	1	1,329	
Salvation Army	10	10,315	
Other Christian sects	8	2,773	
Protestants (not defined)	.....	3,787	
Hebrews	3	5,484	
Buddhists	......	10,110	
Mahometan	......	528	
Agnostic, Infidel, etc.	......	727	
Freethinkers	......	5,469	
Other sects	......	1,035	
No denomination	......	4,927	
No religion	......	3,136	
Object to State religion	......	11,237	
Not stated, or ill-defined	......	2,791	
Total	1,090	1,123,954	

From the figures just given the aboriginal population, to the of 8,020, have been excluded, and in calculating the average of adherents to each clergyman the Christian Brethren have cluded with "other Christian sects"—a heading which also co 23 Nonconformists, 153 Christian Israelites, 16 Moravian New Church, 345 Catholic Apostolic Church, 132 Calvinist s, 548 Christadelphians, and 307 Latter-day Saints, besides 302 who call themselves Unsectarian Christians. Taking the whole tion (less aborigines), there were 1,031 persons on an average to ergyman.

uerly, religious statistics were collected every year. It has now ecided to have only one collection half way between the Census s, so that new figures will be available every five years. The figures at the present time are those for 1897, but there will be no r collection until the year 1901. In 1897 the number of persons ing Divine Service on Sundays, including adults and children, ed 402,098. When the sparseness of the population in some parts country is considered, the church attendance will appear very and though apparently less than found in the colony of Victoria, roportionately much greater than in England. The number of t attendants on Divine Service in 1890 was returned at 314,979; 85 it was 250,041; and for 1881, 221,031; so that there has been lual increase, fairly keeping pace with the population. The relative ers of each denomination in attendance have remained very much me for several years past. In 1881 the Church of England had rgest attendance, but from 1884 the Church of Rome has taken ad.

figures showing the attendance at Divine Service on Sundays ch of the principal denominations are given hereunder. Sunday-children are not included :—

Denomination.	Number of distinct persons attending Divine Service.	Proportion of Denominations attending Divine Service.
		Per cent.
Church of England	106,043	35·7
Roman Catholic	133,337	68·2
Presbyterian	32,235	73·1
Wesleyan Methodist	64,019	74·1
Other Methodists	10,680	67·5
Congregationalist	10,667	74·7
Baptist	5,291	89·6
Salvation Army	30,185	90·7
Other Denominations	9,641	59·4
Total	402,098	56·7

Church of England is the largest religious denomination in the , whether judged by the number of professed adherents, the er of clergy, or the number of buildings used for Divine Service. g the year 1897 there were 720 churches belonging to this ination, and 775 buildings and dwellings used for public worship, modating altogether 144,419 persons; and the attendance of ual adherents was 106,043. The number of clergy registered under

patent rights, but acts as a commercial safeguard and as an
ment to manufacturers to produce goods of a superior quality.

The goods or manufactures which may be protected by trade
are classified for the purposes of efficient registration into
divisions; the fees, however, are the same for each class. The
actions under the Act and the fees received during each of the
years ended 1897 were as follow :—

Transactions.	1893.	1894.	1895.	189
Applications for trade marks.........	394	546	516	[illegible]
New trade marks granted	304	381	397	[illegible]
Trade marks transferred	63	94	52	[illegible]
,, refused and withdrawn	27	66	61	[illegible]
Amount of fees received ....£	1,071	1,430	1,450	[illegible]

The figures given do not wholly apply to registrations
manufacturers, as trade marks, like patents, are unprotected
colony if not registered locally. The registration fees are
of income to the State, as an application for registration
guineas, and a transfer of a trade mark one guinea;
are, however, made for applications withdrawn or refused.
collected during 1897 amounted to £1,542, or £675 more
received for registrations under the Companies Act.

MONEY ORDERS AND POSTAL NOTES.

The money order and postal note systems are worked in
with the Post Office Savings Bank, the three constituting
sub-departments administered by the Postmaster-General.
money order system money may be transmitted from any
South Wales where an office is open to any part of the
The orders are sent either direct to the place of payment or
intermediary agencies, all places within New South
neighbouring colonies being dealt with direct, while to
Australia the intermediary system is applied. Under the
system exchanges are effected between this colony and
Queensland, South Australia, and Tasmania; but its original
to afford means of transmitting amounts of £1 and under
within the colony. As regards small remittances within the
the money order and postal note systems cover somewhat
ground; but as the convenience both of sender and receiver is
of the postal note, it is anticipated that the money order
be almost entirely confined to business of more than £1.

Vesleyan Methodists in Australia received from the English ce, in 1884, an independent constitution. There are eight into which the Wesleyan Methodist communion is divided out the colony there are 420 churches and 514 other preaching ith sittings to the number of 93,835 in all. The denomination ts service 139 regular clergy and 514 local preachers. The of church members is said to be 10,435, while there are 1,231 icants other than members; and the attendance of habitual s at Divine Service is not less than 64,019. The Wesleyan st Church Property Act of 1889 provides for the appointment es to hold all lands acquired by gift, devise, purchase, or e, under a deed, a model of which forms a schedule to the Act; measure gives power to a majority of the trustees to mortgage, e, or lease Church properties. It also provides for the appointa Custodian and an Acting Custodian of Deeds, who are to be by the President of the Conference, and their names published *overnment Gazette*, and registered in the Land Titles Office. ga District and South Sea Missions are attached to the New ales Conference.

rimitive Methodists, United Methodists, and other Methodists churches and 16 other buildings, and 37 clergy; the accommorovided will seat 17,226 persons; and the attendance at Divine s about 10,680.

ongregational Church has 64 churches, as well as 21 buildings or s used for worship; and the sittings provided will accommodate ersons. The clergy licensed to celebrate marriages number 55, ttendance at Divine Service on Sundays averages about 10,667.

arious Baptist Churches in the colony have 33 licensed ministers, churches and 36 school-houses or other buildings devoted to orship; the Sunday attendance averages 5,291 persons, but sitting accommodation for 10,470. The Baptist Union of New ales is not incorporated, and so cannot legally hold property for the denomination. Annual sessions, with half-yearly es, are held, the chair being taken by a President, who is nnually. For several sessions a draft constitution was under ideration of the Union, which, amongst other matters, provides properties which now belong or may hereafter accrue to the hall be held under a Model Trust Deed, by Trustees to be duly d. The constitution was adopted and is now in force, but the f incorporation remains in abeyance.

alvation Army was established in Australia in 1882. Melbourne de the chief centre for Australasia under the command of a sioner, and Sydney was constituted the headquarters for New Vales, with a separate chief officer, who is termed Colonel, mand, all officers and members bearing military titles and tions. The various ranks are Commissioner, Colonel, Brigadier, Staff-Captain, Captain, Adjutant, Ensign, Lieutenant, and Cadet.

The rank and file consist of sergeant-majors, sergeants, and sol
There are also treasurers and secretaries to corps. Persons who
sympathy with the Salvation Army, but who have not subscribed
“Articles of War”—which combine a confession of faith and a
against the use of intoxicating liquors and baneful drugs—for
Auxiliary League and contribute to the funds of the Army. P
desirous of membership are publicly received, after one month's pro
and subscription to the “Articles of War,” and are then attac
the corps stationed nearest their place of residence. The Army ha
9 officers licensed to celebrate marriages, but has 282 building
for service, accommodating 42,000 persons. The number of p
attending Sunday service is stated by the authorities to be 30,185

Besides those above enumerated, there are other distinct re
bodies, for the most part Protestant denominations, with clergy li
by the State to celebrate marriages. The number of clergy minis
to these in 1897 was 84; the churches, school-houses, and public bu
used for Divine Service numbered 153; and the attendance was
9,641 persons.

The number of registered ministers belonging to all faiths was
and the churches numbered 2,341, in addition to which there were
dwellings or other buildings used for public worship. The accom
tion provided would seat about 445,580 persons. The average
ance was about 402,100.

Nearly all the religious bodies maintain Sunday-schools. The
ance of children at the Sunday-schools of the leading denomin
with the number of schools and teachers during 1897, was:

Denomination.	No. of schools.	Teachers.			Scholars on the Rolls.		
		Males.	Females.	Total	Males.	Females.	Total.
Church of England ..	621	1,282	3,067	4,349	24,210	31,698	55,908
Roman Catholic	555	249	1,177	1,426	14,391	18,542	32,933
Presbyterian	252	625	1,109	1,734	7,749	9,743	17,492
Wesleyan Methodist	375	1,440	1,869	3,309	13,800	17,165	30,965
Other Methodists ...	87	448	534	982	4,261	5,312	9,573
Congregational	69	330	441	771	3,888	5,118	9,006
Baptist	44	181	220	401	1,932	2,449	4,381
Salvation Army	96	136	293	429	2,488	6,387	8,875
Other Denominations	68	154	193	347	1,720	2,129	3,849
Total	2,167	4,845	8,903	13,748	74,439	98,543	172,982

tendance shown in the preceding table amounts to 49 per cent. tal children between the ages of 7 and 15 years, inclusive, ages children generally attend Sunday-schools. The number y-schools and teachers, and the attendance, so far as the have been collected during the last ten years, were :—

	Number of schools.	Number of teachers.	Average attendance of Scholars.		
			Male.	Female.	Total.
	1,724	11,267	50,556	61,735	112,291
	1,832	11,568	52,778	63,896	116,674
	1,840	12,019	54,520	67,365	121,885
	1,887	12,169	54,932	68,592	123,524
	1,916	12,260	51,739	66,673	118,412
	1,969	12,180	51,928	66,187	118,115
	2,049	13,131	51,025	66,105	117,130
	2,167	13,748	55,960	72,420	128,380

No commission is paid by one colony to another in respect
obtained for intercolonial use, but poundage is charged
colony in which a note is issued and by that in which it is
poundage collected in New South Wales during the last
was £549; during the year 1894, £3,878; during
during 1896, £7,839; and during 1897, £9,092. The notes
value from 1s. to 20s., and the poundage payable thereon
1d. to 4d., according to the following scale:—

Value of note.	Poundage.	Value of note.	Poundage.
s. d.	d.	s. d.	d.
1 0	1	5 0	2
1 6	1	7 6	2
2 0	1	10 0	3
2 6	1	15 0	3
3 0	1	20 0	4
4 0	1		

INSURANCE.

There are no Acts of the New South Wales Parliament
the business of fire, life, and other forms of insurance, and
panies engaged in the business are either incorporated
Acts or under the Companies Act. As the law does not
publication of returns of the business transacted within the
is not customary for companies to disclose this information.
figures available, therefore, are those relating to their whole
but the cases are few in which a statement of the whole
company throws light on its operations in New South
inconvenience arising out of the state of the law in regard to
has been the subject of complaint by all companies seeking to
business on sound lines, especially those companies engaged
insurance. No deposit or other guarantee of genuineness is
and it is open to any one to start a life office, the business
being only limited by the extent to which the credulity of the
may be abused. The evils in regard to fire companies are not
as for life companies, as the risks taken are almost invariably
periods; but they are sufficiently great to call for speedy

l Wardens' clerks, and fill other offices having no direct rith police duties. The test which is sometimes applied in rtain the law-abiding character of the populations of the nies, namely, to compare the numbers of persons protected er, is quite worthless unless the diverse nature of the duties by the police and the vast difference in the areas of the e also taken into consideration. The comparison afforded ving table may, therefore, only be accepted for what it is figures, like those previously given, refer to the end of the

Colony.	Police.			To each Police Officer.	
	Metropolitan.	Country.	Total.	Inhabitants.	Square miles.
uth Wales......	754	1,143	1,897	691	164
a	644	754	1,398	841	63
land	181	646	827	579	808
Australia........	166	189	355	1,018	2,546
n Australia.....	118	312	430	349	2,269
nia	43	227	270	636	97
ealand...	55	475	530	1,362	197

rison of the police forces of the principal cities of Austranited Kingdom, and the United States, is given in the next it would appear that the Australasian capitals have pro- less police supervision than the other places enumerated in his, however, of itself argues nothing in favour of the lawracter of the population of the Australasian cities, but rather number of police could with advantage be added to the force ed for their protection :—

	Strength of Police.	Population to each Police Constable.	Cities.	Strength of Police.	Population to each Police Constable.
	No.	No.	United Kingdom—	No.	No.
....	754	553	Manchester	1,031	490
....	644	712	Edinburgh	507	545
....	181	584	Glasgow	1,310	531
....	166	880	Dublin	1,145	308
....	118	321	United States—		
....	43	911	New York.........	5,051	299
l	55	813	Philadelphia	2,451	427
....	55	1,048	Chicago	3,400	342
lom—			Brooklyn	1,836	438
....	14,260	395	Boston	1,094	468
....	1,294	400	Baltimore	817	531

Of the nine Australasian institutions, the Australian Mu
dent Society and the Mutual Life Association of Austral
incorporated under special Acts; and the City Mutual Lif
Society (Limited) and the Citizens' Life Assurance Company
were registered under the Companies Act, the former in 18
latter in 1886. The five remaining institutions were inco
Victoria.

The results of the latest published actuarial investigati
various societies were as follow:—

Institution.	Year when established.	Basis of Valuation.	Date.
		Per cent.	
Head Office in New South Wales—			
Australian Mutual Provident Society	1849	3½ (a)	31 Dec., 1897
Mutual Life Association of Australasia.	1869	4 (q)	31 Dec., 1894
City Mutual Life Assurance Society (Limited).	1879	4 (t)	31 Dec., 1897
Citizens' Life Assurance Company (Limited).	1886	3½ (a)	31 Dec., 1897
Head Office in Victoria—			
Australian Alliance Assurance Company.	1862	3½ (t)	31 Dec., 1897
National Mutual Life Association of Australasia (Limited).	1869	4 (t)	30 Sept., 1895
*Mutual Assurance Society of Victoria (Limited).	1870	4 (q)	31 Dec., 1895
Australian Widows' Fund Life Assurance Society (Limited).	1871	4 (q)	31 Oct., 1896
Colonial Mutual Life Assurance Society (Limited).	1874	4 (q)	31 Dec., 1894
Australasian Temperance and General Mutual Life Assurance Society (Limited).	1876	3½ (q)	30 Sept., 1896

* Amalgamated with the National Mutual Life Association from 1st Jan

(a) Annual. (t) Triennial. (q) Quinquennial.

The net or present liability represents the present valu
assured in respect of whole life and endowment assurance,
bonuses, endowments, and annuities in force at date of v
the present value of the future pure premiums thereon.
given represents the amount available for distribution a
holders, and actuarial and commercial reserves.

Seven of the companies are mutual, and the remaind
termed in insurance parlance "mixed"—that is, propriet
dividing profits with the policy-holders; while two of th

into which the colony has been forced and held there by one cause ne. The absence of an Act to prevent the influx of criminals from er provinces; the large floating population of the colony; the ferences in the criminal code; the greater strictness of police adminis- tion—all these are matters which must be recognised as having rted and as exerting an appreciable influence on the prevalence of me in New South Wales. But careful investigation during the last r years has shown that the returns, both of the police and of the rks of Petty Sessions, have painted the colony in much darker hues n the actual number of the criminal population warranted. Formerly at importance was attached to the number of apprehensions shown the police to have been made during the year; but it has become dent that the figures obtained from the police are somewhat mis- ding, as they represent the total transactions of the various stations l offices rather than the actual number of persons apprehended. For mple, it is the practice to count an arrested person at every office o which he may be brought prior to making an appearance before the nch, and it is not too much to say that the police returns are over- ted to the extent of something like 13 per cent. Under these umstances, it was thought better to abandon altogether the res compiled by the police, and to rely upon the returns of the rts alone, since every person who is entered in the charge books st be brought up in open court; but this course has only been sible within the past three years, for the returns of the Clerks of ty Sessions themselves have been to a great extent misleading. eed, it has now been considered advisable to discard the istics of magistrates' courts for all years prior to 1891, for down 890 the form of return filled up by the Clerks of Petty Sessions, ch was that drawn up for use in the United Kingdom, was such as end itself very readily to careless compilation, being of such a kind the entries made could not be checked in the statistical office. ordingly, another form of return, which would ensure the accurate y of the proceedings in magistrates' courts, was prepared and came use for the first time in 1891. Since that year imperfections in compilation of the statistics have been remedied one by one as they e manifested themselves. It was found that a large element of fusion was introduced by the presentation of the business of the rts on the different bases of cases, offences, and persons. One case, ourse, might cover a number of persons, and one person might be ged with several offences on the one appearance. To make a proper parison between the population and the persons who are given to lessness the number of offenders should be taken, and it is on this s that the figures have been compiled since 1894. For the preceding e years shown in the comparative tables which follow this explanation, the actual numbers of offences were obtainable, and the figures have efore been reduced to the basis of offenders by a method which gives orrect an estimate as it is possible to obtain.

was amalgamated with the National Mutual Life Association of Australasia (Limited) from 1st January, 1897.

Institution.	Amount Assured, excluding Bonuses and Annuities.		
	1892.	1894.	[illegible]
	£	£	[illegible]
Australian Mutual Provident Society	38,888,283	39,510,199	[illegible]
Mutual Life Association of Australasia......	4,430,669	4,166,339	[illegible]
City Mutual Life Assurance Society (Ltd.).	719,999	776,946	[illegible]
Citizens' Life Assurance Company (Ltd.)...	429,084	845,984	[illegible]
Australian Alliance Assurance Company ...	769,987	645,462	[illegible]
National Mutual Life Association of Victoria (Ltd.).	6,479,001	6,338,659	[illegible]
Mutual Assurance Society of Victoria (Ltd.)	3,665,517	3,332,342	—
Australian Widows' Fund Life Assurance Society (Ltd.).	4,939,075	4,553,965	[illegible]
Colonial Mutual Life Assurance Society (Ltd.).	10,827,028	10,533,271	[illegible]
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)...	827,566	812,379	[illegible]
* Equitable Life Assurance Society of the United States......	4,335,522	4,211,067	[illegible]
* Mutual Life Assurance Company of New York........	1,107,258	1,253,462	[illegible]
* New York Life Insurance Company	1,883,765	1,665,068	† [illegible]

* Australasian business only, including Bonuses. † Year [illegible]

The following table gives a summary of the new business com during the past nine years by the nine Australian offices repres New South Wales. The assurance and endowment policies only are with, as the annuity transactions are unimportant :—

Year.	Policies.	Amount Assured.		Annual Premiums.	
		Total.	Per Policy.	Total.	Per £100 of Assurance.
	No.	£	£	£	£ s. d.
1889	27,553	7,905,449	287	252,736	3 3 11
1890	28,840	8,420,670	292	274,614	3 5 3
1891	28,032	8,435,673	301	273,061	3 4 9
1892	27,965	7,977,154	285	262,647	3 5 10
1893	24,488	6,019,408	246	197,086	3 5 6
1894	25,721	6,062,494	236	202,315	3 6 9
1895	27,098	6,384,455	236	215,013	3 7 4
1896	29,611	6,895,567	233	230,896	3 7 0
1897	30,761	6,974,149	227	240,962	3 9 1

It will be noticed that the average sum assured fell to £227 i while the annual premium for £100 is considerably larger t any of the other years shown. It would seem from these tw that the depression of the past five years has had the effect

It will be seen from the above table that of the 56,290 persons arged before magistrates during the year, only 1,439 were committed higher courts, and no less than 54,851 were summarily dealt with—nvictions being recorded in 44,695 cases, while 10,156 persons were charged after evidence had been taken, or against whom proceedings re not pressed. Appended is a division of the accused persons cording to sex, from which it may be gathered that while females tributed 7,726 to the ranks of the offenders, only 1·32 per cent. of ir number were committed to a higher tribunal, as compared with 74 per cent. of the males. Of the females committed, more than 45 r cent. were charged with larceny, and crimes connected with the birth children :—

Sex.	Charged before Magistrates.	Summarily dealt with.			Committed.
		Convicted.	Discharged, etc.	Total.	
es	48,564	38,338	8,889	47,227	1,337
ales	7,726	6,357	1,267	7,624	102
Total	56,290	44,695	10,156	54,851	1,439

omparing the male and female offenders with the population, it will found that of every 100,000 males in the colony during 1897, 6,915 e charged with offences against the law, while of an equal number emales but 1,270 were accused before magistrates. The summary victions give the proportions of 5,459 per 100,000 males and 1,045 100,000 females. In the case of committals, however, the females rge from the comparison on much more favourable terms ; for while of every 100,000 males were sent up to higher courts during the r, the proportion of females so dealt with was but 17. The preceding le, reduced to a population basis, will be found below :—

Sex.	Per 100,000 of Population.				
	Charged before Magistrates.	Summarily dealt with.			Committed.
		Convicted.	Discharged, etc.	Total.	
Males	6,915	5,459	1,266	6,725	190
Females	1,270	1,045	208	1,253	17
Persons	4,295	3,410	775	4,185	110

Although the mean population within the metropolitan area in 1897 s 414,020 as compared with 896,530 in the country districts, 29,454

The aggregate receipts and disbursements, under the accepted
for the ten institutions were as follow :—

Receipts.		Expenditure.	
	£		
Premiums—		Claims	[illegible]
New	229,511	Surrenders	[illegible]
Renewal	2,161,118	Annuities	[illegible]
Consideration for Annuities	53,803	Cash Bonuses and Dividends	[illegible]
Interest	1,047,560	Expenses	[illegible]
Other Receipts (Rents, etc.)	11,104	Amount written off to Depreciation, Reserves, etc.	[illegible]
Total £	3,503,096	Total £	[illegible]

In 1894, for the first time for many years, the amount of
earned and rents received was insufficient to meet the demands
the head of claims, and similar conditions prevailed during the follo
three years; the excess to be made good from the other
however, was small.

The yearly additions to the accumulated funds are largely depend
on the volume of assurances current, and any changes in the one
reflected in the figures of the other; it is, therefore, not surprising
coincident with the shrinkages in the volume of assurances in force
the year 1894, the amount added to the accumulated funds had
pondingly fallen off. During the years 1895, 1896, and 1897, how
the additions to the funds have shown a considerable increa
amount of funds and the interest received thereon, for the eigh
ended with 1897, were as follow :—

Year.	Accumulated Funds.		Interest.	
	Additions during year.	Total Amount.	Amount received.	Average Rate realised.
	£	£	£	per cent.
1890	1,404,215	14,580,210	827,909	5·97
1891	1,380,553	15,960,763	902,774	5·91
1892	1,360,100	17,320,863	967,678	5·81
1893	1,147,143	18,468,006	991,369	5·54
1894	912,276	19,380,282	1,041,529	5·30
1895	1,057,942	20,438,224	1,037,477	5·21
1896	996,045	21,434,269	1,038,993	4·96
1897	1,192,146	22,626,415	1,047,560	4·51

ASSETS AND LIABILITIES OF ASSURANCE COMPANIES.

The societies establish annually a statement of their liabiliti
assets, with the object of showing the distribution of the accum
funds and the amount placed to commercial reserve. The retur
however, in no way connected with the valuation balance-shee
pared at the date of the actuarial investigation. The assets and

therefore, that the somewhat large number of offenders sum-
lealt with is made up principally of persons who cannot justly
ded amongst the criminal classes, the total number of offenders
the person and against property, including forgery and offences
the currency, being 9,055 out of a total of 54,851. Appended
found a classification of the offenders summarily dealt with
ach of the past seven years, with the proportions per 100,000 of
on. As already explained, the figures originally published for
rs 1891, 1892, and 1893 referred to offences, and they have,
e, been reduced to the basis of offenders as in the succeeding

Against the Person.	Against Property, with violence.	Against Property, without violence.	Forgery and Offences against the Currency.	Good Order, and all other Offences.	Total.
			Number of Offenders.		
5,515	917	4,622	43	56,433	67,530
6,178	995	5,596	24	56,140	68,933
5,381	1,004	5,127	19	54,926	66,457
4,386	953	5,302	24	49,772	60,437
4,105	799	4,865	15	49,335	59,119
3,866	747	4,792	33	45,726	55,164
3,877	756	4,398	24	45,796	54,851
			Per 100,000 of Population.		
482·3	80·2	404·2	3·7	4,934·7	5,905·1
522·9	84·2	473·6	2·0	4,751·7	5,834·4
444·5	82·9	423·5	1·6	4,537·5	5,490·0
354·4	77·0	428·5	1·9	4,022·3	4,884·1
324·6	63·2	384·7	1·2	3,901·0	4,674·7
300·2	58·0	372·1	2·6	3,550·8	4,283·7
295·8	57·7	335·6	1·8	3,494·4	4,185·3

ll be seen from the above table that, in spite of the growth of
ion, there has been a marked diminution in the actual number
lers during the last seven years, the continuity of the fall being
only in 1892, when the number of people charged with offences
the person and against property was higher than in 1891.
he returns are compared on the basis of population the decline
roportion of offenders per 100,000 inhabitants is shown to have
narkably steady, the rate being 5,905·1 in 1891, 5,834·4 in
,490 in 1893, 4,884·1 in 1894, 4,674·7 in 1895, 4,283·7 in 1896,
85·3 in 1897. The figures relating to the individual classes of
are somewhat disturbed by those checks incidental to all
, but it will be found that the rates for all classes of crimes
len in the course of the seven years.

of their affairs, and do not distribute their expenses of manage that the cost of new business may be distinguished from that of business; the reports of other companies are unequalled in any par the world:—

Institution.	Expenses of Management.	
	Amount.	Proportion to—
		Premium Income.
	£	per cent.
Australian Mutual Provident Society	181,579	12·51
Mutual Life Association of Australasia	41,676	27·71
City Mutual Life Assurance Society (Ltd.)	9,384	28·23
Citizens' Life Assurance Company (Ltd.)	10,502	18·74
Australian Alliance Assurance Company	4,177	21·17
National Mutual Life Association of Australasia (Ltd.)	77,652	25·74
Australian Widows' Fund Life Assurance Society (Ltd.)	37,635	25·13
Colonial Mutual Life Assurance Society (Ltd.)	79,421	22·60
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	11,888	34·73

ASSURANCE IN VARIOUS COUNTRIES.

The average amount assured per policy for each colony, and for United Kingdom, Canada, and the United States, is given in the lowing table. The figures in some instances are probably some overstated as all the companies do not show complete returns of business in each colony, but the results may be taken as a fair esti for each province. The Australasian business of the American tutions excluded from the previous returns has been included for purpose of establishing the Australian averages shown herewith:—

Country.	Average sum assured per Policy.	Average Premium per £100 of Assurance.
	£	£ s. d.
Australasia	280	3 6 5
New South Wales	318	3 3 2
Victoria	279	3 5 11
Queensland	315	3 0 8
South Australia	242	3 6 11
Western Australia	315	3 1 1
Tasmania	264	3 6 5
New Zealand	264	3 0 1
United Kingdom	397	3 7 6
United States (New York only)	502	....
Canada	347	....

The average amount of assurance per head of population w Australasia, £21; in Canada, £13; in the United Kingdom, £1 wn above, the number of convicted persons sentenced to y imprisonment was 3,233, and adding those incarcerated in paying the fine or of finding security, viz., 17,421, the total ıprisoned was 20,654, out of 44,695 summarily convicted by rates, or 46·2 per cent. The number of fines paid was 22,763; robable that some of those who were imprisoned in default of ly paying the fine imposed were discharged before the term d; the amount having been paid in the meanwhile. The total ved by way of fines during 1897 was £20,749, of which 11,988 was paid into the Consolidated Revenue, £5,847 was he Police Reward Fund, and £2,914 was paid to the Transit ners, benevolent institutions, municipalities, and informers. nt of the fines received during each year since 1888 is given ith the exception of the amounts for the years 1895, 1896, and sums are exclusive of rewards paid to informers and of fines nunicipalities and other corporate bodies :—

Year.	Amount.	Year.	Amount.
	£		£
1888	22,623	1893	21,934
1889	20,432	1894	17,915
1890	20,596	1895	22,011
1891	25,955	1896	19,313
1892	24,450	1897	20,749

the Criminal Law Amendment Act (46 Vic. No. 17), has been made for whipping as an additional punishment, wanton and unprovoked assault and for indecent exposure. h must consist, in the metropolitan district, of two Stipendiary es; and in the country districts, of a Stipendiary or Police e and one or more Justices of the Peace. In no case was added to a sentence of imprisonment passed in a magistrate's ing the year 1897.

rst Offenders' Probation Act of 1894 (57 Vic. No. 23), conrovisions similar to those which have proved of so much value eatment of crime in older countries, came into operation st June. Under this enactment a youthful offender who convicted of an offence committed under sudden temptation iven an opportunity of showing by his future conduct that his n was only temporary, and with this object in view the pref contamination by gaol associations is provided for. The person e is dealt with in this manner by the presiding magistrate or judge uired to serve the sentence passed upon him, but is liberated ng into a recognisance, with or without sureties, for his good during the period over which his sentence extends, the

It will be observed that a regular decrease in the sequestrati taken place since the financial crisis of 1893, the total for 1897 less than one-half of that in the year first-mentioned, and only more than the bankruptcies in the fairly prosperous year 1888. decline confirms the evidence of the growing prosperity of the already indicated by the increase in the savings of the people, and by the life assurance returns.

A bankrupt may obtain his discharge in one of three ways— sequestration order made against him being annulled, by the re his estate, or by a certificate of discharge being granted to him. bulk of the certificates issued are obtained under the last-mentioned only three sequestration orders have been annulled, and 105 estates been released since the existing Act has been in force, while certificates of discharge have been granted. The number of cates issued from 1st January, 1888, to 31st December, 1897, w follows:—

Year.	Sequestration Orders annulled.	Estates released.	Certificates of Discharge granted.	Compositions accepted.	[illegible]
	No.	No.	No.	No.	[illegible]
1888	....	1	26	5	[illegible]
1889	....	14	114	7	13
1890	....	4	95	4	10
1891	....	3	309	....	[illegible]
1892	1	19	185	....	[illegible]
1893	....	6	152	2	[illegible]
1894	....	....	147	....	14
1895	....	12	142	....	15
1896	1	21	95	1	11
1897	1	25	66	1	9
Total	3	105	1,331	20	1,4

The number of estates in respect of which certificates of dischar release were granted was 1,459, or 12 per cent. of the total sequestra In some few cases application is made for a certificate and rel allowing for these, it would appear that out of 100 bankrupts unable or too indifferent to take the necessary steps to free them from bankruptcy. Under the law the property of an uncerti bankrupt, even if acquired subsequently to sequestration, is liab rges declined to 17·1, although it again slightly increased in the ng year. The following table shows the proportion of summary tions by magistrates, of acquittals and discharges, and of com- s to higher courts :—

Year.	Summary Convictions.	Acquittals and Discharges.	Committals to Higher Courts.
	per cent.	per cent.	per cent.
1870	69·0	24·7	6·3
1875	70·1	25·3	4·6
1880	76·9	18·4	4·7
1885	82·9	14·1	3·0
1890	80·4	16·0	3·6
1891	81·6	14·8	3·6
1892	80·3	16·6	3·1
1893	80·4	16·0	3·6
1894	82·9	13·1	4·0
1895	77·4	20·2	2·4
1896	80·5	17·1	2·4
1897	79·4	18·0	2·6

APPREHENSIONS.

as already been explained that the returns of the police are somewhat ated, and in order to obtain the actual number of persons appre- l it is necessary to reduce the figures compiled by them. This erefore been done in the following table, showing the number of s arrested during each of the last ten years, with the proportion per 0 of population. For the last four years the number of arrested s brought before magistrates has been taken, while for the pre- years the figures have been estimated by a process which leaves loubt of their close approach to absolute accuracy. It will be seen e rate per 100,000 inhabitants shows a satisfactory decline during riod, and that it is now only about three-fourths of the proportion 8 :—

Year.	Arrests.		Year	Arrests.	
	Number.	Per 100,000 of Population.		Number.	Per 100,000 of Population.
1888	37,768	3,646	1893	38,562	3,186
1889	34,012	3,189	1894	36,044	2,913
1890	34,210	3,105	1895	36,939	2,920
1891	40,012	3,499	1896	36,642	2,845
1892	40,445	3,423	1897	35,443	2,704

Court in winding up the estates. Each official pays all money by him to the Registrar in Bankruptcy, who places the amount to credit of the Bankruptcy Estates Account, from which all fees, and dividends are met. The official assignees are also required furnish quarterly statements of the transactions in each estate that period, and the figures given in the two statements following obtained from these returns. The charges under each head were:—

Year.	Peremptory Charges.		Legal Costs.	Paid into Consolidated Revenue.		Commission to Official Assignees.	[illegible]
	Auction.	Rent, Valuation, Labour, etc.		Court Fees.	Percentage.		
	£	£	£	£	£	£	
1890	4,268	9,613	3,064	70	382	3,443	[illegible]
1891	3,019	18,439	6,202	1,508	726	5,398	[illegible]
1892	3,692	10,350	7,192	1,582	891	5,581	[illegible]
1893	3,952	13,743	7,133	1,473	652	5,691	[illegible]
1894	3,571	18,308	7,139	1,528	1,143	8,610	[illegible]
1895	2,780	16,752	8,519	1,414	718	6,182	[illegible]
1896	1,955	22,488	6,113	1,321	551	4,665	[illegible]
1897	1,617	13,929	8,100	1,293	691	5,129	[illegible]

The official assignees receive 2½ per cent. on the amount realised, a similar rate on the amount of dividends declared; in addition this the Judge may grant special remuneration. The dividends and the undivided balances at the end of each year were as follow:—

Year.	Dividends Paid.	Money in hands of Official Assignees.		Balance of Bankruptcy Estates Account.
		Unpaid and unclaimed Balances.	Unpaid Dividends.	
	£	£	£	£
1890	26,289	1,987	287	22,027
1891	52,304	1,449	432	21,651
1892	45,084	1,145	591	20,284
1893	40,433	9,532	132	27,287
1894	70,381	863	305	30,985
1895	50,640	314	530	16,738
1896	31,557	9,610	747	23,553
1897	37,900	1,474	1,065	13,298

On the 30th June, 1898, there remained to the credit of the B ruptcy Unclaimed Dividend Fund £6,892, and to the Bankr Suitors Fund, to which account interest earned by the Unc Dividend Fund is placed, the sum of £620.

BIRTHPLACES OF OFFENDERS

the census of 1891 the persons born in New South Wales formed
er cent. of the total population; while of the 35,443 males and
les arrested during the year 1897, only 13,363, or 37·7 per cent.,
born in the colony. These figures are not, however, to be taken
emselves as proving the law-abiding character of the native-born as
ared with the remainder of the community, as the bulk of the
e under 20 years of age are by birth Australian, while males
ly predominate over females among the British and foreign-born
nts within the colony. With the steady increase in the number
ose born within the boundaries of New South Wales, there has
ally been a corresponding increase in the proportion contributed by
to the total number of apprehensions, the figures in 1897 being
per cent. as against 32 per cent. in 1888; and, similarly, the
rtion of arrests of persons born in other parts of Australasia has
in this colony from 6·7 per cent. to 11·8 per cent. in the same
d: while a decline in the proportion of persons of other than Aus-
n birth resident in New South Wales has been accompanied by a
ase in the proportion of apprehensions contributed by them, the
s falling from 61·3 per cent. to 49·5 per cent. during the past decade.
t little can be gained by a comparison of offences with the number
rsons of each nationality, as the bulk of the offences are committed
e adults, who comprise only one half of the native-born as against
90 per cent. of the residents of certain other nationalities. Taking
the male offenders committed to gaol, and comparing them with
nale population, the most law-abiding portion of the community
the much-abused Chinese, who show 583 convictions per 100,000.
; come the native-born inhabitants of New South Wales with
per 100,000; then the South Australians, with 938; the Italians
1,264; the Germans with 1,387; the English, with 1,475; the
orians with 1,622; the Scotch with 1,651; the Tasmanians with
4; the New Zealanders with 2,034; the Irish with 2,054; the
nslanders with 2,270; the Western Australians with 2,836; the
es with 2,861; the Russians with 3,152; the French with 3,821;
Swedes and Norwegians with 4,000; and the natives of the
ed States with 4,304. Even these figures, though deduced from
er data, require some explanation. The offenders belonging to
United States and to Scandinavia are for the most part sailors,
e offences should not be charged against the general population;
of the French are recidivistes from New Caledonia; and, indeed,
ay be said that the offences do not arise from the nationality of
ffender, but from his ignorance, his poverty, or his environment.
onnection with this subject, it may be remarked that natives of
tries which show a low average of comparative criminality exhibit
he colony a rate of apparent lawlessness difficult to understand

except on the supposition that a freer life and a larger remuneratio awakened dormant tendencies which otherwise would not have dev It must be admitted, also, that the immigrant and sea-faring pop from other countries do not necessarily represent the most law- portion of the community from which they spring.

The native countries of all persons arrested in 1897 will be fo the following table:—

Birthplaces.	Offences.					
	Against the person.	Against property, with violence.	Against property, without violence.	Forgery and offences against the currency.	Against good order.	Not included in the preceding.
	No.	No.	No.	No.	No.	No.
New South Wales	965	314	2,063	51	9,396	584
Victoria	156	37	285	9	1,562	67
Queensland	34	10	62	4	297	13
South Australia	40	7	78	....	489	11
Other Australasian Colonies	55	19	142	4	685	28
England	322	87	628	20	5,230	240
Scotland	77	24	154	5	2,046	49
Ireland	200	67	313	13	5,558	87
Other British possessions	36	9	49	....	256	31
France	17	5	40	4	161	1
Germany	24	13	67	4	333	23
China	35	3	34	1	41	17
Other Foreign Countries	110	24	146	1	1,247	123
Total	2,061	619	4,061	116	27,301	1,[illegible]5

At present there seems room for legislation with a view to the influx into the colony of the criminal class from elsewhere. pared with some of the other colonies, New South Wales labours a serious disadvantage in this respect. As the above table shows, or nearly 6 per cent., of the total apprehensions during the ye sisted of native-born Victorians, while at one of the prisons border fully 25 per cent. of the total admissions during the months consisted of criminals from the neighbouring colony.

RELIGION OF OFFENDERS.

inal religious profession of each person arrested is ascertained ·d in the charge-sheet. During 1897 the arrests of persons ›o each of the various denominations were :—

Religions.	Offences.						Total. Apprehensions.
	Against the person.	Against property, with violence.	Against property, without violence.	Forgery and offences against the currency.	Against good order.	Not included in the preceding.	
	No.	No.	No.	No.	No.	No.	No.
land	785	233	1,765	47	9,762	533	13,125
c	927	278	1,612	46	13,054	470	16,387
	142	42	294	15	2,585	80	3,158
	58	19	135	4	532	46	794
	10	7	17	....	47	5	86
	6	3	16	....	68	7	100
	32	14	38	....	473	59	616
r	1	....	6	....	19	5	31
	11	4	23	....	65	6	109
Denominations	5	....	2	....	7	....	14
	5	4	37	....	58	2	106
	12	1	8	....	31	17	69
	67	14	108	4	600	55	848
	2,061	619	4,061	116	27,301	1,285	35,443

nd that no great reliance can be placed on the statements of ıe persons who are arrested as to the religious belief which ıally profess, as in some instances offenders are found to have ıemselves as of three or more different religions in the course but allowing for all such persons the foregoing may be taken atement of the creeds adopted by offenders. The table shows ess of Roman Catholic offenders. This denomination numbers per cent. of the population, while the proportion of persons ıg themselves was 46·2 per cent. of the total offenders—a conhings which has obtained for many years, and which has in lity been due to the lower social condition of the members of ı Catholic community.

EDUCATION OF OFFENDERS.

ree of education of those who were arrested has also been s far as possible. Four grades of education were formerly r classification purposes, but in consequence of the difficulty the term "Superior Education" that classification has been , and as the amount of education possessed by persons who be able to read only must be very slight, the distinction

The amounts paid into the Treasury on account of the assuran
during each of the seven years ended 1897 were as follow:—

Year.	Collections, less Refunds.	Compensation and Cost of Legal Actions.	Amounts Credited to Fund.
	£	£	£
1891	5,345	Nil	5,345
1892	4,670	1,053	3,617
1893	4,083	Nil	4,083
1894	4,882	367	4,515
1895	4,276	1	4,275
1896	3,912	12	3,900
1897	4,721	35	4,686

The assurance fund, which forms part of the Trust Fund
Treasury, amounted to £161,576 at the close of 1897, and bears i
at rates varying from 3 to 5 per cent. The accretions to this fund-
is, interest and collections—average over £8,000 per annum, wh
total withdrawals during the whole currency of the Act have only
a little over £3,000; thus, as there is every likelihood of the a
annually added growing larger as years roll on, the fund bids
attain considerable dimensions.

MORTGAGES.

All mortgages, except those regulated by the Bills of Sale
1855 and the Merchant Shipping Act of 1894, are registered
Registrar-General's Office, and it is a fair assumption that the
recorded represents the bulk of the mortgages effected. Where
than one mortgage has been effected on the same property, the m
take priority according to the time of registration, and not in acc
with their respective dates. The amount of consideration for w
mortgage stands as security is not always stated in the deeds, the
"valuable consideration" or "cash credit" being inserted instea
specific sum in many of the transactions of banks and other loan
tions, in cases where the advances made are liable to fluctuati
as this frequently occurs when the property mortgaged is of great
an exact statement of the total advances against mortgages can
given. It must be borne in mind, therefore, that the figures
tables given below refer only to cases in which a specific am
stated in the deeds, whether that amount be the sum actually ad
or not. What is true of mortgages registered holds good for disch
the amount of which, as shown in the tables, is still further redu
the exclusion of mortgages which have been satisfied by foreclo
seizure, a record of which is not available. Many mortgages, the
appear in the official records as current, notwithstanding that
property which they represent has passed away from the mortgag

is
re

are, in point of value, unimportant; nevertheless, to compl transactions in mortgages, returns covering the period of ten ended 1897 are given below. The table is incomplete, as the sideration in respect of conveyances and transfers under the Property Act cannot be given; while the figures for 1897 are ex of 24 conveyances under mortgage, and 118 transfers of mortgag which the amounts involved are not stated:—

Year.	Deeds Registration Act of 1843.			
	Conveyances under Mortgage.		Transfers of Mortgages.	
	Number.	Consideration.	Number.	Consideration.
		£		£
1888	192	378,662	276	829,753
1889	204	680,240	83	38,690
1890	117	88,116	210	229,040
1891	348	245,111	246	390,243
1892	392	162,307	253	1,219,401
1893	430	216,925	383	276,507
1894	374	381,738	508	485,489
1895	320	159,608	600	768,368
1896	467	256,967	370	287,361
1897	450	280,583	146	174,379

MORTGAGES ON LIVE STOCK AND WOOL.

Liens on wool, mortgages on live stock, and liens on growing are registered under special Acts, the two first mentioned temporary measure passed in 1847, which was continued from time and became permanent by a special enactment in 1860, liens on growing crops under one passed in 1862. The mortg live stock are current till discharge, while the liens on wool the end of each season and terminate without being formally dis Mortgages under each Act are valid without the stock or crops delivered to the mortgagees. The figures relating to live given in some detail, as they throw considerable light on the of the great industry of the country. They must, however, be with this qualification, that the amount stated represents in many merely nominal indebtedness, and the advances are not in every made to persons financially embarrassed. But with full allow ntly advocated that the dipsomaniac should not be sent to gaol to d with criminals and have his weakened faculties subjected to their l influence, but should be sent to an asylum specially built for his ption. The present system of dealing with the offence has proved be practically worthless, as the same faces are constantly re-appearing ore magistrates, in some cases more than a hundred times in the rse of a few years. An examination of the criminal records of the ony also discloses the rather startling fact that more than 40 per cent. the gaol population have commenced their career with an imprison- nt on a charge of drunkenness.

INQUESTS.

n all cases of violent or unnatural death, death resulting from ident, sudden death, death in a hospital, and in cases of suicide, it is duty of the Coroner for the district to hold an inquiry into the cause e has reasonable grounds for believing that death was due to violence other unnatural means, and for that purpose he is empowered to er the exhumation of a body if necessary, to summon jurors and nesses, and to commit for trial a person found guilty by the jury of crime of manslaughter or murder. Every death which takes place gaol or in a lockup must be investigated, and it is also customary to d an inquest on the bodies of all persons executed in gaol. In a trict where no coroner has been appointed, or the officer is unable to d the usual inquest, a magistrate may hold an inquiry; but owing the fact that he is not empowered to commit a suspected person for l, he must terminate the inquiry in all cases where facts are dis- sed which point to the criminality of a person, and direct the police prosecute at the nearest police court. The numbers of deaths during 7, the causes of which were investigated by Coroners or Magistrates, re 982 of males and 251 of females, giving a total of 1,233 inquests l magisterial inquiries. The finding of the courts in 289 cases was t death was due to disease, and in 805 cases to violence, while the se of death in 139 cases was not clearly defined.

It is provided by Act 24 Vic. No. 10 that when any real or personal perty has been destroyed or damaged by fire, the Coroner exercising isdiction in the district where the outbreak has occurred shall, if he sider the case to be a fit one for investigation, hold an inquiry with e object of ascertaining the origin of the fire. The procedure is ilar to that followed in inquests held in connection with cases of death. e Coroner can, in accordance with the decision of his jury, commit a son for trial on a charge of arson. Inquiries were held during 1897 o the origin of 186 fires, and the verdict returned was one of accident 17 cases, of arson in 48, of insufficient evidence in 120 cases, while one case no verdict was returned. There are a Coroner and a Deputy- oner for Sydney, and 133 Coroners for the country districts, as well e for the colony generally.

figures in any year do not represent the total number of sheep by mortgage, and that the proportion of the flocks held under lien mortgage, after making every allowance for releases, is therefore what higher than that stated. This remark applies equally figures given for horned cattle and horses.

DISCHARGES OF MORTGAGES.

The number of discharges registered amounts in an ordinary about one-sixth of the mortgages of live stock registered. The for the ten years ended 1897 were:—

Year.	Number.	Amount.	Year.	Number.	Amount.
		£			£
1888	240	1,160,307	1893	286	1,062,827
1889	256	1,191,089	1894	334	496,041
1890	368	2,512,551	1895	372	1,053,863
1891	380	1,184,372	1896	432	886,218
1892	317	985,048	1897	385	549,064

There were also 42 discharges of liens, amounting to £20,683 1897; these represent transfers of security and repayments duri season, as liens terminate by effluxion of time at the close of the season.

LIENS ON GROWING CROPS.

Under the provisions of the Act, liens on agricultural and ho tural produce, the duration of which must not exceed one ye made. Such advances do not ordinarily reach large sums, eithe vidually or in their total, as there is an element of uncertainty security offered. During the last ten years the advances range £75,439 to £247,466 per annum. The liens registered in 189 1,947 in number, covering advances to the extent of £151,334:—

Year.	Number.	Consideration.	Year.	Number.	Consideration.
		£			£
1888	1,006	247,466	1893	1,789	159,007
1889	1,227	83,748	1894	2,291	181,432
1890	1,089	75,439	1895	2,621	219,392
1891	1,171	78,448	1896	2,567	202,605
1892	1,416	130,155	1897	1,947	151,334

MORTGAGES ON SHIPS.

Mortgages of registered British vessels are dealt with un Merchant Shipping Act of 1894. The mortgages are, accordin Act, divided into two classes, one in which the ship is the sole ncide with the number placed on trial during the same some persons committed at the end of one year do not make earance until the following year. Excluding those against e Attorney-General declined to file a bill, there were 1,330 ecorded in the returns of the Superior Courts of the colony 397, 1,243 being males and 87 females. The following table manner in which these accused persons were dealt with :—

How dealt with.	Central Criminal and Circuit Courts.		Courts of Quarter Sessions.		All Superior Courts.	
	Males.	Females.	Males.	Females.	Males.	Females.
—						
Gaol	120	11	681	41	801	52
ed under First Offenders'	7	1	28	2	35	3
	73	7	309	25	382	32
reed	6	...	3	...	9	...
	1	...	1	...	2	...
r	1	...	2	...	3	...
ded against	4	...	7	...	11	...
otal persons	212	19	1,031	68	1,243	87

ying these accused persons according to the nature of the rith which they were charged, it will be found that, both in of males and of females, offences against property without are the most numerous, followed by offences against the person ces against property with violence. Forgery and offences ie currency furnish the next highest rate of males; the number offenders being but 7 as against 83 male offenders. Below und a statement of the offences of which the 1,330 persons n in superior courts during 1897 were accused, with the rates 00 of population :—

Offences.	Males.		Females.		Persons.	
	Number	Per 100,000 of population.	Number	Per 100,000 of population.	Number	Per 100,000 of population.
nst the person	341	48·5	23	3·8	364	27·8
nst property with violence	211	30·0	8	1·3	219	16·7
inst property without violence	553	78·8	41	6·8	594	45·3
offences against the currency	83	11·8	7	1·1	90	6·9
nst good order	30	4·3	1	0·2	31	2·4
included in preceding	25	3·6	7	1·1	32	2·4
Total	1,243	177·0	87	14·3	1,330	101·5

lowing statement shows the character of the principal offences prisoners were tried during each year since 1888, and affords for interesting study. Cases which from various causes were

BILLS OF SALE.

All mortgages of personalty other than ships and shipping ap wool, live stock, and growing crops, are filed and entered at the Su Court under the Bills of Sale Act of 1855. This Act provides that document shall be filed and entered within thirty days after it is or given, otherwise the transaction is illegal; and to prevent fra imposition the records are open to the inspection of the public. total amount of advances annually made on bills of sale is not r available, but judging from the number of bills filed the sum m considerable. The provisions of the Act are availed of by all cla the community, but brewers and money lenders figure conspic among the transferrees. No complete record is made of th terminated voluntarily or by seizure, the official records showing those discharged in the ordinary way. Seizures of the security which generally comprises household furniture and stock-in-tra common occurrences, and it is to be regretted that no record of is kept; but, as previously shown, the neglect in the registrat foreclosures is a weakness in the procedure under all Acts reg mortgage transactions. The bills filed and the discharges registe the eight years ended 1897 were as follow :—

Year.	Bills of Sale.	
	Filed in Supreme Court.	Satisfied or orders for discharge made.
1890	3,045	221
1891	2,697	136
1892	2,776	132
1893	3,111	96
1894	2,752	77
1895	2,512	140
1896	2,375	158
1897	3,368	156

SUMMARY OF MORTGAGES.

The volume of mortgages registered and discharged under ea is given below. As the returns are incomplete, from causes alluded to, no general total has been established. The followi er, 1897, there were 2,257 prisoners, exclusive of debtors, in ient, thus distributed :—

Prisons.	Prisoners.	Accommodation—one prisoner per cell.	Accommodation—more than one prisoner per cell.
Principal gaols	1,782	1,406	3,763
Minor gaols	355	292	941
Police gaols	120	240	810
Total	2,257	1,938	5,514

otal number of prisoners received under sentence into the various roughout the colony during the year 1897 was 12,774, exclusive rs. Of these, 6,712 were received at Darlinghurst Gaol, and Biloela Gaol, Sydney. The following table gives the number iers received into gaol under sentence for the last ten years :—

Year.	Males.	Females.	Total.
1888	10,519	3,712	14,231
1889	9,299	3,583	12,882
1890	9,203	3,084	12,287
1891	9,553	3,257	12,810
1892	10,677	3,106	13,783
1893	10,704	3,149	13,853
1894	10,436	3,100	13,536
1895	10,472	3,130	13,602
1896	11,224	3,061	14,285
1897	9,923	2,851	12,774

ay with confidence be asserted that the number of persons into gaols, as compared with population, is greatly decreasing ; the actual number was considerably less in 1897 than ten years ly.

verage number of persons in confinement during the year has n ascertained, but the number in detention at the close of each known, and the figures for ten years will be found in the following nt. Taking one year with another, these figures may be accepted representing the average daily number for each year given.

Prisoners have been classified under two heads—those under se and those awaiting trial, debtors being excluded.

Year.	In confinement.			Under sentence.	Awaiting trial.
	Males.	Females.	Total.		
1888	2,035	309	2,344	2,223	121
1889	2,036	322	2,358	2,233	125
1890	2,138	281	2,419	2,290	129
1891	2,325	291	2,616	2,489	127
1892	2,345	268	2,613	2,484	129
1893	2,232	208	2,440	2,295	145
1894	2,350	252	2,602	2,469	133
1895	[illegible]	[illegible]	2,497	2,345	152
1896	[illegible]	[illegible]	2,354	2,216	138
1897	2,015	242	2,257	2,136	121

As in the case of the arrests, the largest number of prisone any age-period is of those whose ages range from 25 to 30 years, proportionately to the population the age-group 40 to 45 years is productive of criminals, with 2,419 per 100,000 inhabitants; foll by 35 to 40 years, with 2,369; 25 to 30 years, with 2,168; and 35 years, with 1,851 per 100,000 of population. The following gives the number and ages of persons sentenced to penal serv labour, or imprisonment during the year 1897. Sentence of was recorded against 7 male prisoners, but in four cases it was muted to imprisonment for life.

Ages.	To Death.		To Penal Servitude.		To Imprisonment.						Total Pris Sentenc	
					With Labour.			Without Labour.				
	Males.	Females.	Males.	Females.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.
7 and under 15	..	..	..	..	14	..	14	43	2	45	57	[illegible]
15 „ 20	1	..	2	..	273	46	319	372	89	461	648	[illegible]
20 „ 25	..	..	13	..	400	100	500	442	203	645	855	[illegible]
25 „ 30	..	..	41	..	963	128	1,091	1,157	393	1,550	2,161	[illegible]
30 „ 35	1	..	23	1	572	126	698	815	365	1,180	1,411	[illegible]
35 „ 40	1	..	18	..	490	96	586	872	379	1,251	1,381	[illegible]
40 „ 45	..	..	16	1	352	109	461	712	313	1,025	1,080	[illegible]
45 „ 50	1	..	3	..	265	63	328	542	130	672	811	[illegible]
50 „ 55	1	..	9	..	168	34	202	381	109	490	559	[illegible]
55 „ 60	1	..	1	..	105	22	127	265	54	319	372	[illegible]
60 and over	1	..	6	..	198	20	218	383	68	451	588	[illegible]
Total	7	..	132	2	3,800	744	4,544	5,984	2,105	8,089	9,923	[illegible]

Taking the returns from all the gaols, it will be found that 8,87 tinct persons were convicted during the year 1897, of wh males, and 1,294 were females. The following table groups, the number of distinct persons of the male sex wh and more than once during 1897, any convictions they may have rgone in previous years being disregarded. In the figures given returns from all the gaols have been combined, and each person ted with the total number of sentences received, whether served in prison or in more than one.

Males Convicted during 1897, with Ages and Number of Times Convicted.

Ages.	1	2	3	4	5	6	7	8	9	10	11	12	13	18	22	Total.
ler 10	16	..	..	..	..	..	..	..		..	..	..	..	..	..	16
und under 11	9	..	..	..	..	..	..	..		..	..	..	..	..	..	9
„ 12	7	..	..	..	..	..	..	..		..	..	..	..	..	..	7
„ 13	19	..	..	..	..	..	..	..		..	..	..	..	..	..	19
„ 14	16	..	..	..	..	..	..	..		..	..	..	..	..	..	16
„ 15	18	1	..	..	..	..	..	..		..	..	..	..	..	..	19
„ 16	35	2	..	..	..	..	..	..		..	..	..	..	..	..	37
„ 17	70	9	1	..	..	..	..	..		..	..	..	..	..	..	80
„ 18	105	7	4	..	..	..	..	..		..	.	..	..	..	..	116
„ 19	127	17	6	1	1	..	..	..		..	..	..	..	.	.	152
„ 20	140	25	3	..	2	..	..	..		..	..	..	..	..	..	170
„ 21	116	21	3	3	..	1	..	..		..	..	..	.	..	..	144
„ 25	465	61	12	6	1	2	..	..		..	..	..	..	..	..	548
„ 30	1,341	229	65	22	7	5	1	2	..	..	..	..	..	..	..	1,672
„ 35	900	121	42	18	5	4	2	1	..	1	..	..	..	..	.	1,094
„ 40	808	132	38	22	3	2	7	3	1	..	..	1	..	.	..	1,017
„ 45	566	128	43	13	3	4	2	1	..	..	..	..	1	1	..	762
„ 50	470	78	20	7	7	3	2	1	1	1	1	..	..	..	..	591
„ 55	331	52	20	4	1	..	1	..	1	..	..	1	..	..	1	412
„ 60	197	39	11	5	1	4	1	..	..	..	..	1	..	..	..	259
„ 65	165	30	10	4	2	..	..	..	..	..	..	..	..	..	.	211
„ 70	101	18	4	2	1	..	1	..	1	..	..	..	..	..	.	128
„ 75	45	7	2	2	..	..	..	..	..	..	..	..	..	..	..	56
„ 80	22	4	2	1	1	..	..	..	1	..	..	..	..	...	..	31
and upwards	11	1	..	..	..	..	..	..	..	.	..	..	..	..	..	12
Total	6,100	982	286	110	35	25	17	8	6	2	1	3	1	1	1	7,578

These figures disclose some interesting facts. It is sad to see that the ge number of 123 boys under 16 years of age had to be sent to gaol; it is well known that the problem of dealing with juvenile offenders ne of the most serious and embarrassing that the magistrates have ope with, especially as, until the month of August of the year 5, there was no Reformatory in the colony to which boys of the inal class could be sent. In the absence of such an institution, the istrates, unwilling to subject boys of tender age to the contaminating ences of a gaol, generally ignored the criminal charges and sent n to the nautical school-ship Sobraon as deserted or neglected dren. This, though the lesser of two evils, was manifestly unfair he class of children for whom the Sobraon was primarily intended, largely increased the difficulties of its management. Some few s ago extensive buildings were erected at Rookwood for the accomlation of criminal boys, but they were put to other uses. The

Carpent Reformatory has now been established for boys w been co ed of criminal offences. Particulars of the Institu g Education and also Social Condition.

able feature of the foregoing table is the large numb gaol more than once during the year. The prison convictions numbered 1,478, while their convicti list of second convictions commences with a boy of h a man who had passed his eightieth year; the t are headed by a lad of 16, and so on, as the list show man, whose age was between 50 and 55 years, was convicted than 22 times, and 18 convictions were recorded against another in the age-group 40–45 during the year. The number of males years of age to g and of these 107 were convic than once.

There were 1,294 females imprisoned during the year 1897, the large proportion of 514, or 39·7 per cent., were convicted m once. The convictions of girls under 21 years of age numbered of these 35 were imprisoned more than once. Four women were as many as 19 times during the year, two had 17 convictions against them, two were convicted 16 times, and two were con times during the year. The following table shows the nu females imprisoned, their ages, and number of convictions d year:—

Ages.	Females Convicted during 1897, with Ages and Number of Tim															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Under 10	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11 and under 12.. ..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12 " 13.. ..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13 " 14.. ..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15 " 16.. ..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16 " 17.. ..	5	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17 " 18.. ..	12	1	1	..	2	1	..	..	..	..	..	..	..	..	..	..
18 " 19.. ..	21	2	3	..	..	1	..	..	..	..	..	..	..	..	..	..
19 " 20.. ..	30	5	4	..	..	1	..	..	..	..	..	..	..	..	..	..
20 " 21.. ..	12	3	5	3	..	1	..	..	1	..	..	..	..	..	..	..
21 " 25.. ..	75	21	12	3	2	1	1	1	..	..	..	..	1	..	..	..
25 " 30.. ..	137	42	18	19	5	4	2	2	..	..	2	1	2	1	..	..
30 " 35.. ..	106	23	19	8	10	6	3	4	4	6	..	..	..	..	..	..
35 " 40.. ..	107	33	15	10	4	10	4	3	3	3	..	..	..	..	..	1
40 " 45.. ..	92	32	16	7	6	4	1	2	..	..	..	1	2	2	1	1
45 " 50.. ..	62	15	6	3	4	2	2	1	2	..	..	..	..	..	..	..
50 " 55.. ..	40	14	5	3	1	1	3	1	..	..	1	..	..	..	..	..
55 " 60.. ..	26	3	..	4	2	1	2	..	..	..	..	..	..	..	..	..
60 " 65.. ..	21	3	3	..	..	1	1	..	..	..	..	..	..	..	..	..
65 " 70.. ..	5	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..
70 " 75.. ..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
75 " 80.. ..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
80 and upwards.. ..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	780	199	108	62	36	34	19	14	10	9	3	2				

e has been a falling off in the value of the articles of food con- in New South Wales during the last few years, due both to a se in the quantities consumed and to a fall in prices. As late 2 the value of food and beverages consumed amounted to 12½d. ad daily, or exclusive of intoxicants, to 10d.; while in 1897 these ts had fallen to 11½d. and 9½d. respectively.

main articles of consumption in the colony are meat and bread, ail value of which equals about 42 per cent. of the total expenditure food. The following is the approximate retail cost of the chief which enter into daily consumption:—

	£
Bread	2,906,000
Fresh meat	4,986,000
Vegetables and fruits	2,110,000
Milk, butter, cheese, etc.	3,315,000
Other farm produce	1,113,000
Sugar	1,540,000
Tea, coffee, etc.	736,000
Other foods and non-alcoholic beverages	1,948,000
Total expenditure on food	18,654,000
Wines, beer, and spirituous liquors	4,086,000
Total expenditure on food and beverages	£22,740,000

quantities of the principal articles of diet annually required by ember of the community are estimated to be as follow:—

Flour		244·0 lb.
Oatmeal		8·0 „
Rice		10·3 „
Meat: Beef	157·0 lb.	281·5 „
Meat: Mutton	111·6 „	
Meat: Pork, &c.	12·9 „	
Potatoes		202·8 „
Sugar		95·9 „
Butter		17·7 „
Cheese		3·8 „
Tea		7·8 „
Coffee		8·0 oz.
Cocoa and chocolate		8·7 „

For the year 1899 the total demand of the colony for the
classes of food will be approximately :—

Flour		165,500 tons.
Oatmeal		5,000 „
Rice		6,300 „
Meat	Beef	95,100 „
	Mutton	67,600 „
	Pork and bacon	7,800 „
Potatoes		122,800 „
Sugar		58,100 „
Butter		10,700 „
Cheese		2,300 „
Tea		10,584,600 lb.
Coffee		678,500 „
Cocoa and chocolate		727,900 „

The production of wheat in the colony at an average harvest
now be more than equal to the demands of the population. Bas
the consumption of 1897 of 6·1 bushels per head, the demand of 1
exclusive of seed, will be about 8,277,000 bushels, the requirements
seed thus rendering neccessary an importation of at least 1,500,
bushels.

Oatmeal and rice are the only other articles of cereal produce larg
consumed. Rice is not grown to any extent in the colony, and
quantity required is imported either directly or indirectly from Ch
and India. The land adapted for the growth of this plant in N
South Wales is not very extensive in area, and is probably put to be
use. Oatmeal, though manufactured in the colony, is also lar
imported.

In the matter of meat supply the colony is almost independent
external assistance. The consumption of fresh meat of all kind
extremely great, and, though possibly less than in the neighbou
colony of Queensland, it exceeds per head that of any other co
The requirements of the colony for food alone amounted in 18
338,330 head of cattle, and 3,347,006 head of sheep; and though
supply of cattle sufficient to meet the demand was beyond the reso
of the colony, the number of sheep available for market very la
exceeded even the number given above, and were it not that
is preferred to mutton, no stock need have been importe
slaughtering.

The swine slaughtered for food during 1897 numbered 86,547.
quantity of bacon and hams made, according to the returns coll
was 6,544,781 lb., and the quantity imported for local require
during the year was 1,616,220 lb. The annual consumption per h
pork and its manufactured products, averages about 12·9 lb.

The amount of potatoes imported for local consumption during
was 52,962 tons, while the quantity available from the fields

ous behaviour, using bad language, vagrancy, and loitering on ways :—

Offences.	Total Offences.	Length of Sentences.							
		2 days and under.	3 days and under 1 week.	1 week and under 1 month.	1 month and under 6.	6 months and under 12.	1 year and under 2.	2 years and under 5.	5 years and under 10.
nces against the person ...	65	1	...	33	23	5	3	...	...
nces against property with iolence ...	34	...	...	27	6	...	1	...	...
nces against property ithout violence ...	199	2	3	63	91	23	11	5	1
gery and offences against he currency ...	5	...	...	...	1	3	...	1	...
nces against good order ...	2,530	352	324	1,201	574	78	1	...	...
nces not included in he preceding ...	18	2	4	5	6	1	...	...	...
otal offences committed by females ...	2,851	357	331	1,329	701	110	16	6	1

Allusion has already been made to the number of persons with more n one conviction recorded against them during 1897. It is interesting compare these figures with the records of previous years, which are en below as far back as 1889, beyond which year the statistics of onvictions are not entirely reliable. The table also gives a state-nt of the average number of offences committed by each person fined:—

Year.	Prisoners sent to Gaol more than once.		Offences Committed.		Average number of Offences Committed.	
	Males.	Females.	Males.	Females.	Males.	Females.
1889	1,224	663	3,126	2,539	2·6	3·8
1890	1,196	565	3,165	2,201	2·7	3·9
1891	1,285	584	3,431	2,457	2·7	4·2
1892	1,787	586	4,828	2,326	2·7	4·0
1893	1,642	567	4,141	2,328	2·5	4·1
1894	1,572	576	4,093	2,331	2·6	4·0
1895	1,573	577	4,249	2,338	2·7	4·1
1896	1,751	539	4,679	2,363	2·7	4·4
1897	1,478	514	3,944	2,115	2·7	4·1

From the evidence of the above table there would appear to be a nstant reappearance of the same faces before the Courts to account r so high an average of reconvictions. The proportion of habitual offenders, if those with previous convictions may be so term remarkable, and will perhaps be better illustrated by the follo table than by the one just given. The returns only include convi within the year named, convictions in a previous year being regarded. If all convictions had been included, the proportion for would, in all likelihood, have been about 27 per cent. It must be l in mind, however, that these figures are considerably swollen by constant reappearance in gaol of persons charged with the pseudo-c of drunkenness. Out of 8,872 persons committed to prison d 1897, 2,570, or nearly 29 per cent., were incarcerated on this charg

Year.	Percentage of prisoners with previous convictions.	Year.	Percentage of prisoners with previous convictions.
1888	25·3	1893	23·6
1889	22·5	1894	23·3
1890	22·2	1895	23·5
1891	21·3	1896	23·5
1892	26·4	1897	22·5

It is to be regretted that at present it is impossible to give information concerning prisoners with previous convictions th recorded in the previous table and on page 830; but for future iss this book statistics of this kind will be available. The Internat Union for Criminal Legislation, for the purpose of strengthening s in its defence against "the enemy," recommends the introduction elaborate system under which notice of every conviction for shall be sent by the police to the office in which the birth o convicted person was registered, so that the Registrar of the di may be enabled to keep a record of the career of a criminal birth to death. Apart, however, from the costliness of the system times are not yet ripe for such an innovation; and even if it adopted, it would be several years before results of any valu statistical purposes could be obtained.

The number of distinct persons committed to gaol under se during each of the past ten years is given in the following table. number fluctuated considerably during the period under review, there is ample evidence in this table, taken in conjunction with th page 810, showing the trials in the superior courts, that crime is st diminishing:—

Year.	Persons.	Year.	Persons.
1888	10,096	1893	9,369
1889	8,827	1894	9,215
1890	7,939	1895	9,165
1891	8,791	1896	9,72
1892	8,957	1897	8,8

· Act 4 Vic. 29 a Visiting Justice is appointed to visit each
le is empowered to hear and determine all complaints which
nade against a prisoner of disobeying the rules of the gaol, or
g committed any offence, and may pass a sentence of confine-
a solitary cell for a term not exceeding seven days. In cases
tent insubordination, a charge upheld before two or more
of the Peace renders the prisoner liable to a sentence of close
ent for one month; and if the culprit is a prisoner convicted
, or serving a sentence of hard labour, a punishment of personal
n may be awarded. In no instance was a sentence of whipping
out in 1897. The number of punishments inflicted upon
y prisoners during the last ten years is given as follows:—

Year.	Prisoners punished in gaols.			Percentage of total prisoners punished.
	Solitary confinement.	Other punishments.	Total.	
1888	1,302	246	1,548	9·3
1889	1,195	331	1,526	10·0
1890	1,458	266	1,724	11·8
1891	1,235	304	1,539	10·1
1892	1,412	317	1,729	10·5
1893	1,053	234	1,287	10·9
1894	982	300	1,282	11·0
1895	1,077	228	1,305	11·1
1896	924	247	1,171	12·2
1897	1,146	226	1,372	12·4

were 51 persons—50 males and 1 female—imprisoned for
ring the year 1897. As the time of detention as a rule only
d over a short period, the number of debtors in confinement at
time was not large, and on the 31st December, 1897, there
ly 3 persons in gaol for debt. The number of persons sent to
· debt during each of the last ten years will be found in the
g table:—

Males.	Females.	Total.	Year.	Males.	Females.	Total.
56	1	57	1893	55	3	58
71	1	72	1894	54	4	58
59	2	61	1895	70	4	74
45	...	45	1896	52	2	54
54	...	54	1897	50	1	51

dietary scale in New South Wales prisons comprises bread,
eal, meat, vegetables, salt, sugar, and rice or barley. For males
antity of bread supplied ranges from 12 oz. to 24 oz. daily,

of the quantity over 400 lb. set down for any country is required human consumption, and the figures relating to some of the countries are, therefore, excessive. The substances included in the table a largely supplemented both in America and in Europe by other food, but not more so than in these colonies; and the figures given w probably afford a just view of the comparative quantity and food value of the articles of consumption in each of the countries mentioned. The comparison will appear much more strongly in favour of the colonies when the average amount of work which each individual in the community is called upon to perform is taken into consideration. In Australasia the proportion of women and children engaged in laborious occupations is far smaller than in Europe and America, and the hours of labour of all persons are also less, so that the amount of food-energy required is reduced in proportion. If allowance be made for the fact that only 40 per cent. of the population are adult males, 33 per cent. women, and 27 per cent. children, the quantity of food consumed in New South Wales would appear to be far in excess of the actual requirements of the population, and though the excess may be looked upon as waste, it is none the less evidence of the wealth of the people whose circumstances permit them to indulge in it.

The following table gives the annual consumption of tobacco in Australasia and the principal countries of the world. The use of tobacco appears to be more prevalent in Western Australia and Queensland than in any of the other colonies, while the least consumption is in Tasmania and South Australia. Compared with other parts of the world, the average consumption of Australasia will not appear excessive :—

Country.	lb.	Country.	lb.
Australasia—		Austria-Hungary	3·77
New South Wales	2·57	Italy	1·34
Victoria	2·15	Spain	1·70
Queensland	2·96	Holland	6·92
South Australia	1·92	Belgium	3·15
Western Australia	4·07	Switzerland	2·24
Tasmania	1·80	Sweden	1·87
New Zealand	2·10	Denmark	3·70
United Kingdom	1·41	Turkey	4·37
France	2·05	United States	4·40
Germany	3·00	Canada	2·11
Russia	1·23	Brazil	4·37

CONSUMPTION OF INTOXICANTS.

The consumption of wines, spirits, and fermented liquors has decreasing for some years, although some years show slight increases over the preceding years, as will be seen from the following statem ion of such discharge ; under sentence of five to ten years, with onditions as regards conduct, at a period of two years anterior rge; and under sentence of ten years and upwards, at a period 'ears and six months anterior to discharge. The construction eakwater is being supervised by officers of the Public Works ent, and the prisoners engaged in the work, who are entirely e control of the Comptroller-General of Prisons, receive a small noney, and are supplied with rations, as well as with clothing not of the prison pattern.

s the foregoing, there were at the close of the year 1897 as 347 prisoners who were not employed. The reasons for such n will be found in the following statement :--

spitals	80	Recent arrivals, not set to work	43
ls	14	Under separate treatment	7
r medical treatment	31	Not under sentence (including debtors)	121
pt from work	11		
ners' delegates	14		
ng themselves	2	Total	347
able	24		

s whose cases have not yet been disposed of are allowed heir legal advisers and others who may visit them in refer- their trial. It is not required that they shall wear prison ; and other privileges, consistent with safe custody, are to them. Persons under examination are not allowed to have munication made to them while in the prison except by their risers, unless such a proceeding is specially sanctioned by the onducting the examination.

tinuous good conduct and industry prisoners become eligible ission of sentence, in accordance with the following scale :— s exceeding twelve months but not exceeding five years, one-sixth rm ; sentences beyond five but not exceeding ten years, one-fifth rm ; and sentences of more than ten years, one-fourth of the 'risoners in gaol for the first time, undergoing sentences of over hs and not exceeding twelve months, may receive a remission days for each month ; prisoners in gaol for the second time, ng sentences of over six months, and not exceeding twelve a remission of three days for each month ; prisoners in gaol more times, undergoing sentences of over six months, and not g twelve months, a remission of two days for each month ; in gaol for the first time, undergoing sentences of over three and not exceeding six months, a remission of three days for th. Prisoners serving sentences commuted from capital con- are not entitled to a remission, but their cases may be specially d. Remissions are not granted where the sentence does not hree months.

Under section 409 of the Criminal Law Amendment Act a pri under sentence may be granted a written license to be at large wi specified limits during the unexpired portion of his sentence. Su are required, unless under exceptional circumstances, for good behav and observance of the conditions of the license. The prisoner wi liberated is required to report himself periodically to the police, a liable to have his license cancelled and to be committed to gao undergo the remainder of his sentence upon any breach of the c tions upon which he was released. This system was first adopte September, 1891, and at the end of 1897 it had been put in for 122 cases—those of 118 males and 4 females. Of the 122 licenses is there were on December 31, 1897, 64 still in force, 42 had expired, in 14 cases the balance of the sentence had been remitted and license cancelled, while in only 2 cases was the license-holder returne gaol to complete his sentence.

When the neglected state in which many of the prisoners are rece is considered, it may be said that the death-rate in gaols is light, a shows, moreover, signs of decreasing. A comparison between the d rate in gaols and that of the general population it is difficult to make it may be said generally that the death-rate of all persons received gaol is at present not greater than that of the general populati like ages, while the death-rate of habitual criminals is largely below average. In the following table the number of deaths, exclusiv those resulting from executions, is given for 1880 and subseq periods, together with the death-rate per 1,000 of the average nu of prisoners in confinement during the year. This average has obtained for every year by taking the mean of the numbers in con ment at the end of that year and at the end of the preceding year:

Year.	Deaths.			Death-rate per 1,000 persons in confinement.
	Males.	Females.	Total.	
1880	37	...	37	18·85
1885	39	11	50	19·90
1890	24	2	26	10·84
1891	37	3	40	15·86
1892	36	4	40	15·27
1893	28	6	34	13·42
1894	22	2	24	9·49
1895	19	3	22	8·61
1896	28	2	30	12·35
1897	22	...	22	9·54

Since 1893 returns have been obtained of the height of all per committed to gaol, and the following results, which relate to the 7 males incarcerated during 1897, are given merely as a curiosit statistics. No comparison with the general population can be no data for such a comparison exist :—

	Age Groups.											Total.
	7 to 15.	16 to 20.	21 and under 25.	25 and under 30.	30 and under 35.	35 and under 40.	40 and under 45.	45 and under 50.	50 and under 55.	55 and under 60.	60 and over.	
in. ...	16	..	..	..	..	..	..	..	..	..	..	16
......	4	..	..	..	..	..	..	..	..	..	..	4
......	3	..	..	..	..	..	..	..	..	..	..	3
......	15	..	..	..	..	..	1	..	..	..	..	16
......	2	3	..	..	1	..	..	..	..	..	1	7
......	3	2	..	2	1	..	1	..	2	..	..	11
......	9	8	1	6	..	2	1	1	1	..	4	33
......	11	19	5	10	5	7	..	5	5	1	8	76
......	6	22	8	27	12	15	8	14	17	2	13	144
......	4	27	14	48	44	39	32	20	13	8	27	276
......	8	66	33	104	81	59	61	43	37	18	41	551
......	8	104	65	156	96	116	78	52	50	32	54	811
......	1	103	82	196	132	119	104	90	44	35	72	978
......	1	115	101	274	201	180	104	106	56	46	66	1,250
......	1	77	92	251	160	144	120	80	68	35	51	1,079
......	..	48	70	236	143	140	101	63	47	36	43	927
......	..	34	44	147	88	84	62	38	35	17	26	575
......	..	14	21	106	68	48	39	36	14	15	11	372
......	..	5	6	47	25	29	19	18	9	8	5	171
......	..	3	2	34	20	12	7	14	5	2	3	102
......	..	1	1	12	6	7	3	2	2	..	1	35
......	..	1	..	5	1	1	5	1	..	..	..	14
......	..	..	..	2	..	1	..	..	..	..	1	4
......	..	1	..	..	..	..	1	..	..	..	..	2
....	92	653	545	1,063	1,084	1,003	747	583	405	255	427	7,457

ilar return relating to the 1,250 females committed to gaol in e of the year 1897 shows the following results :—

	Age Groups.											Total.
	13 to 15.	16 to 20.	21 and under 25.	25 and under 30.	30 and under 35.	35 and under 40.	40 and under 45.	45 and under 50.	50 and under 55.	55 and under 60.	60 and over.	
in. ...	1	..	1	2	1	..	1	1	..	..	..	7
......	..	..	..	..	..	..	1	2	1	..	1	5
......	..	..	1	..	1	..	1	..	..	..	..	3
......	..	..	1	2	1	..	..	1	..	..	..	5
......	..	2	3	2	..	5	4	2	6	2	3	29
......	2	4	6	13	3	7	16	7	3	3	4	68
......	..	11	11	21	11	23	17	7	5	3	5	114
......	..	9	15	31	22	30	24	13	10	6	11	171
......	..	22	18	39	32	33	28	17	8	2	9	208
......	..	23	19	38	36	29	23	15	10	4	4	201
......	..	19	15	31	23	28	17	12	8	8	4	165
......	..	12	13	27	28	14	16	5	7	4	2	128
......	..	4	7	15	18	12	13	11	5	2	2	89
......	..	2	6	7	8	6	1	2	2	..	..	34
......	..	2	..	3	..	..	2	1	..	1	..	9
......	..	1	1	1	2	2	..	..	..	1	..	8
......	..	..	..	1	1	..	2	..	1	..	..	5
......	..	..	..	1	..	..	..	..	..	..	..	1
......	3	111	117	234	187	189	166	96	66	36	45	1,250

CAPITAL PUNISHMENT.

In the early days of settlement the spectacle of judicial executi
must have been extremely common. Offences which are now s
marily dealt with by magistrates, and deemed sufficiently punished
imprisonment for two or three months, were in some cases punish
by death. This barbarous system lasted until about the year 18
when the offences of stealing from a dwelling money or goods to
value of £5, and of killing or stealing horses, cattle, or sheep, were remo
from the category of capital crimes. Five years later the punishm
of death was abolished in the following cases :—Riotous destructio
buildings and machinery, riotous assembling, rescue of a person convi
of murder, seducing a person in the Royal Navy from duty, incitin
mutiny, administering unlawful oaths purporting to bind the pe
taking the same to commit any treason or murder, breaking pri
escaping from lawful custody more than once, smuggling while ar
shooting at any vessel, or maliciously shooting or maiming any office
the Navy or Revenue Service. Executions have been less numerou
late years than formerly, the dread penalty being carried out in on
small proportion of cases wherein the death sentence has been pronoun
The number of executions since 1825 is given herewith. In three y
only have there been no executions. Four females have been han
during the period in question :—

Year.	Convictions.	Executions.	Year.	Convictions.	Executions.	Year.	Convictions.	E
1825	54	9	1850	5	4	1874	14	
1826	72	21	1851	8	2	1875	8	
1827	93	29	1852	10	5	1876	15	
1828	106	28	1853	4	2	1877	9	
1829	112	52	1854	11	6	1878	12	
1830	136	50	1855	12	5*	1879	21	
1831	143	32	1856	7	......	1880	21	
1832	156	12	1857	9	4	1881	6	
1833	135	31	1858	9	1	1882	14	
1834	148	44	1859	10	7	1883	9	
1835	142	40	1860	11	5*	1884	8	
1836	79	26	1861	32	2	1885	11	
1837	90	12	1862	18	6	1886	22	
1838	130	19	1863	16	6	1887	4	
1839	53	22	1864	5	2	1888	17	
1840	13	8	1865	10	3	1889	4	
1841	27	18	1866	20	6	1890	1	
1842	47	13	1867	19	4	1891	6	
1843	22	8	1868	13	5	1892	4	
1844	22	8*	1869	6	......	1893	8	
1845	15	3	1870	3	......	1894	8	
1846	11	1	1871	11	3	1895	7	
1847	10	6	1872	19	3	1896	4	
1848	6	5	1873	10	4	1897	7	
1849	6	4						

* One female.

g the seventy-three years embraced in the table just given, 2,346 were sentenced to death, and of these, 1,736 were condemned he first eighteen years. For the whole period the executions d 645, of which 466 were carried out during the first eighteen

ly of the statistics of judicial executions in New South Wales the year 1842 will make it abundantly plain that the barbarous ›f taking life for insufficient cause, so far from striking terror hearts of would-be criminals, had the effect of lowering the ne of the whole community, and, therefore, of making some of bers more prone to commit the very offences which the punish- is intended to prevent. The death penalty is now imposed for attempt at murder, rape, and setting fire to a dwelling knowing e is a person therein; it is, however, generally carried out for only. The following statement shows the number of con- and executions for the offences named for a period of twenty- :—

Year.	Murder and Attempt at Murder.		Rape.	
	Convictions.	Executions.	Convictions.	Executions.
1871	9	3	2	......
1872	14	3	5	......
1873	9	4	1	......
1874	7	2	7	1
1875	7	1	1	1
1876	12	4	3	......
1877	4	2	5	......
1878	8	1	4	......
1879	16	......	5	1
1880	15	4	6	......
1881	3	1	3	1
1882	10	3	4	......
1883	8	1	1	......
1884	7	2	1	......
1885	9	3	2	......
1886	10	2	12	......
1887	3	......	1	4*
1888	15	2	2	......
1889	3	3	1	......
1890	1	1	......	......
1891	5	3	1	......
1892	4	1	......	......
1893	6	5	2	......
1894	7	5	1	......
1895	5	1	2	......
1896	4	1	......	......
1897	3	2	4	1

* Mount Rennie case; convicted in 1886.

According to Mulhall, the expenditure per inhabitant in the leading countries of Europe and in the United States and Canada is as follows:

Country.	Expenditure per head.	Country.	Expenditure per head.
	£ s. d.		£ s. d.
United Kingdom	29 14 9	Norway	19 0 0
France	23 19 4	Denmark	28 11 5
Germany	20 3 4	Holland	20 17 4
Russia	10 1 11	Belgium	25 8 2
Austria	14 4 9	Switzerland	18 0 0
Italy	11 11 0	United States	32 16 2
Spain	15 12 6	Canada	23 2 2
Portugal	11 5 6		
Sweden	20 8 4	New South Wales	39 17 7

The table just given affords but a partial view of the question of the cost of living; for if the total earnings of the countries above enumerated be considered as an element of comparison, it will be found that few countries approach New South Wales in the small proportion of income absorbed in providing food for the people. The following table, given on the same authority as the preceding, shows that while the actual cost of food and beverage is £17 7s. 0d. in this colony, as against £14 4s. 9d. in Great Britain, the earnings required to pay for this food are not larger proportionately than in the countries which appear so favourably in the table. The number of working days in the year is assumed to be 300, allowing for thirteen days' sickness and fifty-two Sundays:—

Country.	Average annual cost of food and beverage.	Ratio of cost of food to earnings.	Days' earnings equal to annual cost of food.
	£ s. d.	per cent.	days.
United Kingdom	14 4 9	42·2	127
France	12 4 5	44·0	132
Germany	10 18 5	49·1	147
Russia	5 19 7	52·0	156
Austria	7 17 4	50·8	152
Italy	6 4 10	51·2	154
Spain	8 9 0	51·2	154
Portugal	7 3 0	59·1	177
Sweden	9 18 11	45·2	136
Norway	9 15 0	47·6	143
Denmark	11 14 0	36·0	108
Holland	10 8 0	46·0	138
Belgium	12 3 1	43·4	130
Switzerland	8 11 7	45·2	136
United States	9 17 7	25·2	76
Canada	8 9 0	32·5	98
New South Wales	17 7 0	39·0	117

ugitive criminals exist between Her Majesty's Government and the
ernments of France, Germany, Austria-Hungary, Brazil, Spain,
y, Belgium, the Netherlands, Denmark, Sweden and Norway,
zerland, Haiti, the United States of America, the Argentine
ublic, Columbia, Ecuador, Guatemala, Mexico, Orange Free State,
tugal, Roumania, Russia, Salvador, Tonga, and Uruguay. In pro-
dings taken in New South Wales under this Act the fugitive is
ught before the Governor, who hears evidence on oath, and, if satisfied
t the person is liable to be extradited, makes out a warrant to that
ct. At the hearing of the case, the Consul for the country to which
person charged belongs, the Crown Solicitor, and the Inspector-
eral of Police are present. If a warrant is made out, the prisoner
ent to Darlinghurst Gaol for fifteen days prior to extradition, during
ch interval he may apply to the Supreme Court for a writ of
as corpus. During the ten years ended 1897 there were alto-
her 22 persons extradited, all of whom were escapees from the
nch penal settlement of New Caledonia.

nder the Fugitive Offenders Act, 1881, provision is made for the
ender from the United Kingdom to a British possession or *vice versa*,
rom one British possession to another, of fugitives charged with the
etration of crimes which are, in the part of Her Majesty's
inions where they are committed, punishable by imprisonment with
l labour for twelve months or more, or by some greater penalty.
ons apprehended under the Act are dealt with at a Magistrate's
rt, and their cases are included in the figures relating to the business
sacted at Magistrates' Courts, and not in the returns relating to
Extradition Court.

uring 1897, 18 fugitive offenders—17 males and 1 female—were
sted in other parts of Her Majesty's dominions, or in foreign
tries, and returned to New South Wales. Of these 6 were sum-
ily convicted before magistrates, and 7 were committed to higher
ts, the other 5 cases being withdrawn or discharged.

here were also 23 fugitive offenders from other portions of Her
esty's dominions arrested in New South Wales, and brought up
magistrates' courts during the year. Of these, 8 were remanded to
toria, 10 to Queensland, 2 to Tasmania, 1 to New Zealand, and 2
outh Australia.

Decrease in Crime.

here are two ways available for testing the increase or decrease in
e: the first, which is by comparing the number of arrests with the
le population of the country, may be said to be a test of the
ingness or otherwise of the people to obey the laws; the second is a
parison of the persons committed for trial by jury with the whole
ulation, and as all serious offenders are so tried, this may be looked
n as a test of the prevalence of serious crime. In making
parisons of this kind it must be borne in mind—first, in regard to

Year.	Bread per 2-lb. loaf.	Fresh Beef per lb.	Butter per lb.		Cheese per lb.		Sugar per lb.	Tea per lb.		Potatoes per cwt.	
	d.	d.	s.	d.	s.	d.	d.	s.	d.	s.	d.
1850	4½	1¾	1	3	0	7	3½	1	10	7	0
1851	5	2¾	1	3	0	7	3½	1	4	6	0
1852	4½	3	1	3	0	7	3½	1	4	6	0
1853	6½	3½	1	5¼	0	7¼	3½	1	4	13	0
1854	7½	4½	2	3	0	9	5	2	6	18	6
1855	9	6	2	4	1	3	7	2	5	21	4
1856	7½	3½	1	11	1	2	6½	2	2½	10	0
1857	5	3½	2	0	1	0	7½	2	6	14	6
1858	6	4	2	0	1	0	7	2	6	15	6
1859	6	4	1	10	1	0	5	2	6	8	0
1860	6½	4	1	6	1	10	5½	2	3	7	6
1861	6½	3	1	8	0	9	5½	2	4	7	3
1862	4½	4½	2	3	0	9	4½	2	0	8	0
1863	4	4½	1	6	0	10	4½	2	0	7	0
1864	5½	4	1	6	0	8	4½	2	0	5	6
1865	7½	3	1	9	0	9	4½	2	0	8	0
1866	6½	3	1	3	1	0	4	2	6	6	0
1867	3½	2½	1	6	0	7½	4	2	0	7	0
1868	4	3½	1	3	0	9	4	2	0	9	0
1869	3½	2	1	6	0	6	4	2	0	4	0
1870	3½	3½	1	3	0	6	4	2	0	5	0
1871	3½	2½	1	3	0	7½	4	2	3	4	0
1872	3½	2½	1	0	0	9	4	1	9	5	0
1873	4	2½	1	3	0	5	4	1	9	3	6
1874	3½	4	1	7	0	6	4	1	9	4	9
1875	3	3½	1	3	0	9	4½	1	9	5	6
1876	3½	5½	1	3	0	7	4	1	9	4	9
1877	4	4½	1	6	0	6	4	2	0	4	9
1878	4	4	1	3	0	6	4	1	9	5	10
1879	3½	4	0	10½	0	6	3½	1	6	6	0
1880	3	3½	0	10	0	7	4	2	0	4	3
1881	3½	3½	0	10½	0	6½	3½	2	0	4	0
1882	4	4½	1	3	0	8	4	2	0	5	6
1883	3½	4	1	4	0	10	4	2	0	6	0
1884	3	4½	1	3	0	9	3½	1	6	6	6
1885	3	4½	1	9	1	0	3	1	9	5	6
1886	3½	4½	1	9	1	1	3½	1	9	6	3
1887	3½	4	1	4	0	10½	3½	1	9	5	0
1888	3	4	1	7	0	8½	3½	1	6	6	0
1889	3½	3	1	4	0	9	3¼	1	6	9	0
1890	3½	4	1	0	0	8	3½	1	6	6	0
1891	3½	4	1	1	0	9	3¼	2	0	5	0
1892	3½	4	1	3	0	8	3	1	6	5	6
1893	3¼	4	1	1½	0	8	2½	1	6	6	4
1894	2¾	3	1	0	0	8	2½	1	6	4	6
1895	2¾	3	1	0	0	8	2½	1	6	4	3
1896	3	3	1	0	0	8	2½	1	6	5	6
1897	3	2½	1	0	0	8	2½	1	6	5	3

ich every year are becoming more largely composed of Australian-n. The decline in the proportion of females arrested is even more iceable than amongst the males. The following figures relating to ales are on the same basis as those in the preceding table :—

Age-group.	1879–82.			1889–92.		
	Population.	Average Annual Arrests.	Per 100,000 of Population.	Population.	Average Annual Arrests.	Per 100,000 of Population.
ears and under 20...	37,565	484	1,288	54,476	463	850
,, ,, 30...	59,969	1,813	3,023	100,391	1,814	1,807
,, ,, 40...	40,345	2,018	5,002	63,993	1,600	2,500
,, ,, 50...	27,189	1,471	5,410	40,895	1,035	2,531
,, upwards..	27,120	1,118	4,122	45,201	740	1,637

urning to the committals to the higher Courts and the convictions re, an even more decided decline is noticeable, and as the committals resent the more serious types of offences, the decline must be looked n as especially satisfactory :—

Period.	Committals.		Convictions.	
	Annual Average.	Per 100,000 of Population.	Annual Average.	Per 100,000 of Population.
1870–74	1,134	215·3	644	122·3
1875–79	1,506	237·8	881	139·1
1880–84	1,693	210·9	1,044	130·1
1885–89	1,539	153·9	885	88·4
1890–94	1,479	125·9	916	78·0
1895–97	1,346	104·5	880	68·3

t will be seen that the fall has been nearly continuous over the ole period, convictions for serious offences being scarcely so numerous they were twenty years ago, notwithstanding the fact that population nearly doubled during the interval.

It may be taken, then, as clearly proved that there has been a great rease in crime during the last twenty-three years. The reform, if it may so termed, has come about owing to a general improvement in the mmunity itself, and not to the reform of individuals by reason of the errent effect of punishments inflicted. It is in vain to look for the rmation of persons who have lapsed into crime; the prison statistics where show that punishment as now administered has in general any h effect. Reference has already been made to persons with previous victions, but, as explained, the convictions referred to are convictions hin the year. If all convictions be included, it would seem that ut 72 per cent. were persons who entered prison during 1897 for the first time or whose history was unknown. Of these, a large num probably not far short of 40 per cent., find their way again into p not deterred by their former experience, or driven to crime by loss of caste which a criminal conviction inevitably involves. Of persons convicted for the second time, 52 per cent. will find their to gaol for the third time, and of the thrice convicted about 60 per will be again received into gaol.

CRIME IN AUSTRALASIA.

The convictions in the higher Courts of New South Wales, taken a series of years, greatly exceed in number those of any other colony in proportion to the pop ey are only exceeded by We Australia. So marked i t that much speculation has indulged in as to the pro cause of the anomaly. It is adm that the people of all the colonies are practically derived from the stock, while their occupations and habits of life are fairly alike a theory has been hazarded that the high rate of crime in New S Wales is due to a blood taint derived from the original bond-popul of this colony. Such a theory is manifestly absurd, as Tasmania province which received proportionately the largest number of con and the population of which has been least diluted by immigration for many years had the most favourable record of convictions. Th no evidence that such a population now exists anywhere in Austra it certainly does not exist in New South Wales. But thoug gratuitous theory above alluded to may be easily disposed of, th remains that the second largest proportion of convictions in the l courts occurs in this colony. Western Australia shows a much l proportion; but its sparse population and peculiar situation warrant the anticipation of a large amount of crime of a kin found in the older settled provinces. The convictions after t the Superior Courts of Australasia, for the year 1897, were as foll

Colony.	Convictions in Superior Courts.	
	Number.	Per 100,000 of Population.
New South Wales	883	67
Victoria	415	35
Queensland	188	39
South Australia	134	37
Western Australia	194	129
Tasmania	31	18
New Zealand	366	[illegible]
Australasia	2,211	

n the foregoing table it will be observed that New South Wales has largest proportion of convictions of any of the colonies except stern Australia, the peculiar circumstances of which have already n alluded to. It has already been pointed out, in explaining the nges in the compilation of the criminal statistics, that the high rate ffenders in New South Wales is due to a number of causes. First ong these, as accounting for the excessive number of convictions in Superior Courts, may be mentioned the differences in the jurisdiction the Courts of the various colonies. For instance, South Australia l Tasmania have no intermediate Courts like the Quarter Sessions of w South Wales and the District Courts with criminal jurisdiction of ne of the other colonies, and many persons who would be committed higher Courts in New South Wales are convicted in the Magisterial urts of South Australia and Tasmania. Further, in Victoria gistrates have a much wider jurisdiction than in New South Wales, d many offenders who are summarily convicted in the former colony uld have to be committed to a higher tribunal in the latter province. will be seen, therefore, that this question of the jurisdiction of the gistracy of the colonies is one which must affect the criminal returns the Superior Courts.

Another point which must be considered is the large number of rsons who drift from one part of the country to another in search of rk. For many years there has been in New South Wales a large pulation whose abode in any district is determined by the existence of lemand for unskilled labour, and it is from the ranks of this floating pulation that a large proportion of the persons convicted of crime is rived. All the colonies have, to a greater or less extent, this class population; but in New South Wales it is numerically the largest. these people settle down to regular employment in a fixed abode and uire interests apart from the excitements of an unsettled life, crime will found to diminish. The neighbouring colony of Victoria, where the rease of convictions has steadily kept pace with the settlement of its pulation, may be cited as an example of this truth, the proportion of nvictions in 1897 being 35 per 100,000, as compared with 101 in 1866.

The laws relating to crime are somewhat similar throughout Australia, although there are one or two important points of difference, such the provision of the Crimes Act of 1890 under which Justices in ictoria may, under certain circumstances, discharge a person accused simple larceny without proceeding to a conviction, which might be nd on investigation to considerably affect the returns. It is possible, , that the administration of these laws may be more rigorous in New uth Wales than in any of the other provinces. This has already been wn to be the case in regard to drunkenness, and offers an additional lanation of the large number of convictions obtained in New South les. It should also be remembered that in this colony there is no : to prevent the influx of criminals, such as exists and is stringently orced in some of the other provinces

THE SUPREME COURT—CIVIL JURISDICTION.

The chief legal tribunal of the colony is the Supreme Court, is at present composed of seven Judges, viz., a Chief Justic six Puisne Judges. Civil actions are usually tried by a jury of persons, but either party to the suit, on cause shown, may appl Judge in Chambers to have the cause tried by a jury of Twice the number of jurors required to sit on the case are chos lot, from a panel summoned by the Sheriff, and from that n each of the parties strikes out a fourth, the remainder thus select both parties forming the jury who are to try the case. The ju constituted the judges of the facts of the case only, being bou accept the dicta of the Judge on all points of law. From the thus constituted an appeal lies to what is called the "Full C sitting *in Banco*, which is generally composed of at least three c Judges. The Chief Justice, or in his absence the senior P Judge, presides over the Full Court, which gives its decisio majority. The circumstances under which new trials are gr are:—Where the Judge has erroneously admitted or rejected terial evidence; where he has wrongly directed the jury on a po law; where the verdict of the jury is clearly against evidence where, from some other cause, there has evidently been a misca of justice.

Provision is made for appeals to the Privy Council, but any wishing to carry his cause before the supreme tribunal of the E must first obtain leave so to do from the Supreme Court. The a in dispute must be at least £500, or affect the construction of a South Wales statute. In other cases application for leave to a must be made to the Privy Council itself. The British Governmen appointed Chief Justice Way, of South Australia, to a seat o Judicial Committee of the Privy Council, so that he may bring deliberations of the Committee his knowledge of the laws, esp the land laws, of the colonies. So far as New South Wales i cerned, there have been, during the ten years ended 1897, 39 a to the Privy Council in common law, 26 in Equity, 2 in Bankr and 1 from the judgment of the Vice-Admiralty Court; of whi appeals in common law were made during 1897. None of these a were in cases directly arising out of the Crown Lands Acts; b number of other cases questions of interpretation of the land la the colony have arisen when the appeals were being considered Privy Council.

The Chief Justice has also an extensive jurisdiction as Comm of the Vice-Admiralty Court, in which all cases arising out of colli etc., in Australian waters, are determined. One of the Puisne J acts as his deputy, but the Supreme Court, as such, has no jurisd in Admiralty cases.

ne of the Puisne Judges also acts as Judge of the Equity Court, from se decrees an appeal lies to the Full Court, and thence to the Privy ncil.

ffairs in Bankruptcy are also dealt with by a Puisne Judge, assisted he Registrar. An appeal can be made to the Full Court against Judge's decision.

nother Puisne Judge presides over the Divorce Court, in which s are usually tried without a jury, an appeal lying to the Supreme rt.

he Equity Judge formerly represented the ecclesiastical jurisdiction he Supreme Court, and heard and decided all applications for the bate of wills and for letters of administration, and also determined s as to the validity, etc., of wills. By the Probate Act of 1890 jurisdiction was vested in the Supreme Court in its Probate sdiction, and the business transferred to such Judge as might be ointed Probate Judge. Motions for rehearing cases, adjudicated this Court, are sometimes made before the Supreme Court or Privy ncil.

A Judge can only be removed from office upon the address of both ses of Legislature. Upon permanent disability or infirmity, or r fifteen years' service, a Judge is entitled to retire from the Bench h a pension, the amount of which, as well as of his salary, is secured regulated by various Acts.

person eligible for admission as a solicitor, provided he has not admitted in Great Britain or Ireland, or in any of the other tralasian Colonies, must have been articled to some solicitor practising ew South Wales, and have served for a term of five years, or in case of a person who has taken a degree in Arts before entering into les, a term of three years, and must have passed the examinations Board, consisting of two barristers and four solicitors, appointed ally for that purpose by the Supreme Court. The admission of icitor can only take place on the last day of any of the four terms which the judicial year is divided. A solicitor who ceases to tise for twelve months continuously may be struck off the roll, hich case it is necessary for him to give a term's notice before can be readmitted. A barrister who has been in practice as for five years, having caused himself to be disbarred, can, under 55 Vic. No. 31, be admitted as a solicitor without examination. ler the provisions of the same Act a solicitor is competent to appear, has the right of audience, in all courts of New South Wales. The rt can suspend or remove from the roll of solicitors any person who, s opinion, has been guilty of misconduct or malpractice.

he Board for approval of qualified persons to be admitted as barristers he Supreme Court of New South Wales, is formed under Act 11 Vic. 57, and consists of the Judges of the Supreme Court, the Attorney-eral for the time being, and two elected members of the Bar. Applits must have been students-at-law for three, or in the case of graduates,

for two years, and have passed all examinations prescribed by the
A *solicitor* who has been in practice for not less than five years,
has removed his name from the roll of solicitors, is entitled,
55 Vic. No. 31, to be admitted as a barrister without
Admission is made in open Court any day in term by any two
sitting together.

During the year 1898 there were 146 persons practising as
of the Supreme Court, while the solicitors numbered 864, of
were in the metropolitan district, and 377 in various country

COMMON LAW JURISDICTION OF SUPREME COURT.

The following table gives the number of writs issued and the
for which judgment was signed in the Supreme and Circuit
(Common Law jurisdiction) during the last eight years. The
writs issued includes cases which were subsequently settled
parties; but the total amount involved in these claims is not,
included in the sum for which judgment was signed. The
judgments signed include taxed costs in all cases where the
have been completed at the end of the year, and relate to
and tried cases only :—

Year.	Writs issued.	Judgments signed.
	No.	£
1890	5,951	751,825
1891	6,144	537,231
1892	6,219	739,419
1893	6,205	724,211
1894	4,866	489,054
1895	4,118	478,225
1896	3,775	388,382
1897	3,146	436,506

The number of causes set down and tried is shown below :—

Year.	Causes set down.	Not proceeded with.	Referred to Arbitration.	Causes Tried.			
				Verdict for Plaintiff.	Verdict for Defendant	Disagreement of Jury.	Nonsuited.
	No.	No.	No.	No.	No.	No.	No.
1890	382	160	......	174	45	3	......
1891	528	252	......	204	71	1	......
1892	450	184	......	212	53	1	......
1893	456	190	......	197	69	......	......
1894	492	196	......	231	64	1	......
1895	426	168	13	196	35	1	13
1896	399	179	4	154	45	2	15
1897	370	147	......	151	50	1	21

EQUITY JURISDICTION.

practice and procedure of the Supreme Court in its equity juris- are regulated by the Equity Act, 1880, and subsequent amending The transactions of the Equity Court during the last eight years follow :—

.	Statements of Claims.	Statements of Defence.	Petitions.	Summonses.	Motions.	Decrees and Orders.
	No.	No.	No.	No.	No.	No.
0	224	115	136	....	....	644
1	212	135	137	....	....	712
2	246	103	143	....	....	829
3	240	115	139	....	....	835
4	221	144	112	148	253	899
5	222	126	128	131	201	897
6	254	166	136	120	258	902
7	222	143	108	110	234	906

PROBATE JURISDICTION.

number of probates and letters of administration granted by the e Court in its testamentary jurisdiction is shown in the following or the last ten years :—

Probates and Administrations—Wills annexed.		Letters of Administration.		Total.	
Number.	Amount sworn to.	Number.	Amount sworn to.	No. of Estates.	Amount sworn to.
	£		£		£
998	3,652,963	667	638,295	1,665	4,291,258
1,115	4,317,734	682	473,611	1,797	4,791,345
1,131	6,605,545	680	922,577	1,811	7,578,122
1,192	4,734,228	767	722,568	1,959	5,456,796
1,287	4,619,164	842	1,150,163	2,129	5,769,327
1,183	3,508,264	782	635,537	1,965	4,143,801
1,372	4,370,217	791	928,567	2,163	5,298,784
1,321	4,185,497	833	672,729	2,154	4,858,226
1,548	5,939,540	940	755,376	2,488	6,694,916
1,335	5,509,935	875	415,107	2,210	5,925,042

figures here shown and those dealt with in the chapter on Private e as given by the Stamp Duties Department do not agree. The gives the gross values of estates, inclusive of such estates as, after gation, are found not to be subject to duty, while the Stamp Department returns the net value of the estates, and excludes ot subject to duty. The returns shown above are also swollen e extent by probates taken out a second time.

It will be seen that, as
1870–4 to be 1,000, the fal
for the imports as compa
average value of the imp
5·7 per cent. less than in
the difference in the value
number for 1885–9 for b
same figure, as the fall i
than in the value of the i
nate trend of prices was c
prices have been favourab
that they will be sustaine

New South Wales, in c
is chiefly affected by the f
Certain calculations which
payable by the State and
and foreign creditors is
made in the colony by pri
to £2,471,000 per annum.
and municipal loans has t
prices, and as a large p
investors is in the same c
portance to these colonies,
increase of production in
population has been such
if the change in regard to
in 1895 be continued, t
respect most hopeful.

composition, or for an arrangement, provided that the scheme has approved by a majority representing three-fourths of the value of oved claims. If such a proposal has been accepted, one or two ees may be appointed in place of, or in addition to, the official nee. After the acceptance and approval of a composition or a ne of arrangement, a bankrupt may have his estate released from stration. He is also entitled to a release when all the creditors been paid in full, or when they have given him a legal quittance e debts due to them. In other cases a bankrupt may give notice lvertisement three months from the date of sequestration of his tion to apply for a certificate of discharge. The application is l within thirty days of the date of the first publication of the tisement. The Judge receives a report from the official assignee, nay either grant or refuse an absolute order of discharge, or suspend peration of the order for a certain time, or grant an order subject nditions respecting the future earnings or income of the bankrupt. atistics of the transactions of the Bankruptcy Court will be found e chapter of this work dealing with Private Finance. The matter st interest from a legal point of view is the expenditure incurred alising estates. On an average, costs seem to absorb 40·35 per of the unsecured assets.

DIVORCE AND MATRIMONIAL CAUSES JURISDICTION.

ior to the passing of the Matrimonial Causes Act of 1873 (36 Vic. 9) the Supreme Court of New South Wales had no jurisdiction in ce. Under that Act the chief grounds for divorce were adultery marriage on the part of the wife, and adultery and cruelty on the of the husband. The present Act was assented to on the 9th , 1892, but did not come into force, owing to an informality, till 6th August. During 1893 an amending Act (56 Vic. No. 36) passed. Under these Acts petitions for divorce can be granted for ollowing causes, in addition to those already mentioned:—*Husband ife.*—Desertion for not less than three years; habitual drunken- for a similar period; being imprisoned under sentence for three s or upwards; attempt to murder or inflict grievous bodily harm, or ated assault on the husband within a year preceding the date of the g of the petition. *Wife v. Husband.*—Adultery, provided that at the of the institution of the suit the husband is domiciled in New South es; desertion for not less than three years; habitual drunkenness for nilar period; being imprisoned for three years or upwards, or having in five years undergone various sentences amounting in all to not than three years; attempt to murder or assault with intent to inflict ous bodily harm, or repeated assault within one year previously. ntitle either party to seek relief on any of these grounds he or she have been domiciled in the colony for three years or upwards at time of instituting the suit, and must not have resorted to the ly for the purpose of having the marriage dissolved.

In addition to the principal causes for which a divorce m obtained, judicial separation may be granted for desertion exte over two years. Petitions of nullity of marriage may be granted in in which the ceremony is rendered void by the law of the land, which some statutory requirements have not been observed, or in one of the parties is incapable of performing the duties of marr The law also provides for suits for the restitution of conjugal ri Before such a suit can be brought there must have been a request conciliatory character to the other party to return to cohabitation.

Further particulars relating to divorce will be found in the cha dealing with Vital Statistics.

DISTRICT COURTS.

District Courts have been established for the trial of civil causes w the sum in dispute does not exceed £200. They are presided ov Judges who are specially appointed for the purpose, and who als form the duties of Chairmen of Quarter Sessions, in which capacity are competent to try all prisoners except such as are charged capital crimes. District Courts sit during ten months of the ye the metropolis, and they are held twice a year in all considerable co towns. The Judge is not ordinarily assisted by a jury, but in where the amount in dispute exceeds £20, either of the parties ma giving notice to the Registrar of the Court, have a jury summ On questions of law, and in respect to the admission or rejecti evidence, an appeal lies to the Supreme Court.

The number of suits brought in the District Courts of the c and the mode in which they were tried, are given in the following for the judicial year ended 1st March, 1898 :—

District.	Summonses.						Causes tried.	
							Verdict for—	
	Causes tried.	Causes settled without hearing and not proceeded with.	Causes referred by parties to arbitration.	Causes left in arrear.	Total summonses issued.	Total amount sued for.	Plaintiff.	Defendant.
	No.	No.	No.	No.	No.	£	No.	No.
Metropolitan and Hunter	2,411	1,005	1	995	4,412	82,484	2,152	259
Southern	259	197	3	35	494	11,943	235	24
South-western	271	188	...	20	479	16,088	232	39
Western	282	188	2	14	486	15,960	257	25
Northern	396	288	2	56	742	18,526	366	30
North-western	111	76	...	14	201	8,047	86	25
Total	3,730	1,942	8	1,134	6,814	153,048	3,328	402

Of the 3,730 causes heard during 1897-98, only 60 were tried by During the same period there were 8 appeals from judgments gi District Courts, of which 3 were sustained. There were also 22 m for new trials, 12 of which were granted, and 10 refused.

MAGISTRATES' COURTS.—SMALL DEBTS CASES.

strates' Courts in the metropolitan district can adjudicate upon here the amount in dispute does not exceed £10, and in the districts upon cases involving an amount not exceeding £30. al number of small debts cases brought before Magistrates' Courts 1897 was 27,824, of which 11,884 were heard in the metropolitan and 15,940 in the country courts. Of the metropolitan cases, ere 10,011 in which the amount involved was under £5; 1,852 in t was between £5 and £10; and 21 in which the amount was ı £10 and £15, this excess over the statutory amount being ıted by costs. Of the cases tried in the country, there were in which the amount was under £5; 3,452 in which it was ı £5 and £10; and 1,931 in which it was between £10 and

LICENSING COURTS.

ıe metropolitan district of the colony the Licensing Court for of intoxicants consists of the Stipendiary Magistrates, with lition of a Justice of the Peace specially appointed for the bringing the number of occupants of the Bench up to seven, f whom form a quorum; while in the country districts the olice Magistrate and two Justices of the Peace, also specially ed, constitute the Court. There has been an absolute decrease number of licensed public-houses in the metropolitan district 881, attributable to the operations of the Licensing Act, which ıto force in that year. In the succeeding year the number of houses in the metropolitan area was 940, and in the country , 2,123; fifteen years later the numbers were 789 and 2,381 vely—a decrease equal to 16·1 per cent. in the metropolis, and ease in the country districts of 12·2 per cent. The following ves particulars respecting the number of public-houses, and the number of residents to each :—

Number of Licensed Houses.			Average number of Residents in District to each House.		
Metropolitan	Extra-Metropolitan.	Colony.	Metropolitan	Extra-Metropolitan	Colony.
858	2,510	3,368	389	379	308
856	2,549	3,405	411	280	313
853	2,575	3,428	434	284	321
847	2,594	3,441	471	295	339
834	2,607	3,441	994	301	348
812	2,558	3,370	513	310	359
795	2,495	3,290	531	327	376
793	2,445	3,238	525	347	391
789	2,387	3,176	519	368	405
789	2,381	3,170	524	381	413

The following table, giving the number of licenses current dur each of the last seven years for the sale of the wines of the colony, be found interesting:—

Year.	Metropolis.	Country.	Total.
1891	192	298	490
1892	215	291	506
1893	241	270	511
1894	233	267	500
1895	271	273	544
1896	266	295	561
1897	293	299	592

PATENTS.

The law relating to the registration of inventions and improvem has been in force since 1853, but it is only within recent years tha provisions of the Act have been availed of to any great extent. 1879 and 1887 the law was amended and the fees reduced to nominal sum of £5 for complete Letters Patent, and £2 for a tificate of Provisional Protection, which latter may, if applicatio made within twelve months from its granting, be converted a patent on the payment of an additional £3. The result has that the business of the Patent Office has greatly increased. inventions registered in 1897 were for the most part not local foreign, and this feature has marked the operations of the Pa Office since its inception. The following is the number of pa and assignments thereof for inventions or improvements regist from 1855 to 31st July, 1887, under Acts 16 Vic. No. 24 and No. 27:—

Year.	Number of Registrations.		
	Patents.	Assignments.	Total.
1855-59	26	......	26
1860-69	173	27	200
1870-79	426	137	563
1880-87	1,164	189	1,353
Total to 31st July, 1887	1,789	353	2,142

The following have been granted under Act 51 Vic. No. 3:—

Year.	Letters Patent.	Letters Patent to supersede certificates.	Certificates of Provisional Protection.	Assignments.	Licenses.
*1887	225	12	183	15	...
1888	490	75	252	58	......
1889	518	89	278	84	3
1890	494	105	274	100	2
1891	540	101	252	111	3
1892	496	82	208	105	8
1893	366	77	240	113	19
1894	410	81	310	80	44
1895	478	88	301	104	17
1896	545	111	314	91	12
1897	569	103	344	112	18

* From 1st August to 31st December.

The numbers of certificates of Provisional Protection and Letters Patent applied for since the amending Act became law on the 1st August, 1887, are 2,956 and 5,131 respectively, and during 1897 the totals were 344 and 569, while 112 assignments were registered during the latter period. In addition to these, 103 Letters Patent to supersede Certificates and 18 Licenses were registered in 1897. The countries from which applications for certificates of Provisional Protection and Letters Patent in New South Wales were received are as follow:—

Country.	Registered during 1897.	Total registered since the 1887 Act became law.	Country.	Registered during 1897.	Total registered since the 1887 Act became law.
stralasia—			France	12	70
New South Wales	266	3,221	New Caledonia	....	3
Victoria	165	1,581	Germany	13	105
Queensland	19	181	Hawaiian Islands	....	2
South Australia	42	297	Italy	4	7
Western Australia	7	22	Japan	....	1
Tasmania	10	39	Portugal	....	2
New Zealand	88	526	Russia	....	9
ited Kingdom	150	1,249	Transvaal	13	21
nada	12	46	Spain	1	2
pe Colony	....	3	Cuba	....	1
ji	....	1	Sweden	4	27
dia	....	2	Norway	1	2
gentine Republic	1	3	Switzerland	1	3
stria	2	17	United States	96	619
lgium	4	16			
nmark	2	9	Total	913	8,087

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      Purchases,
    Leases of Inferior Lands,
    Occupation Licenses,
    Pastoral Leases,
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ssity either follow the work or remain with the artist, but ceases to
st, unless it has been secured by agreement between the parties,
ned at or before the time of the sale or disposition of the original.
entitle a work to copyright it must be new and original, and must
ve been executed in the colony.

Part III. Under this part of the Act protection can be obtained for
w and original designs, not previously published in this colony or
ewhere, such designs being applicable to articles of manufacture or
rks of art, whether intended for purposes of utility, ornament, or
herwise. The protection does not extend to the article itself, but only
the design thereof; consequently, it does not apply to any mechanical
ion, principle, contrivance, application, or adaptation, or to the
terial of which the article is composed. The substances to which
signs may be applied are for registration purposes divided by the Act
o fourteen classes, two years' protection being assigned to some
sses, and three years to others. The design must be applied within
e colony. The registration fee is 10s., and registered designs must
ar a registration mark. If protection is required in more classes
an one, it can only be secured by simultaneous registration.

Part IV contains general provisions, and amongst other matters
clares copyright to be personal property, assignable at law, and transssible by bequest, and subject in case of intestacy to the same law of
tribution as other personal property.

The Copyright Law of England is comprised chiefly in some fourteen
ts of Parliament, of an unusually obscure and conflicting character,
d is extensively elaborated by judicial decisions. Under the "Intertional Copyright Act, 1886," 49 & 50 Vic. c. 33, and the Orders
Council thereunder, the greater part of this body of law, together
th the terms of the Copyright Convention of Berne, is made reciprolly applicable to Great Britain and each of her Dependencies, and
the countries that are parties to the Convention, with their
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r colonies and Algeria; Great Britain, with her colonies and possions; Belgium, Haiti, Italy, Switzerland, Luxemburg, Monaco,
ontenegro, and Tunis—previous copyright treaties being for the most
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ay now be protected by copyright throughout the whole Empire, by
gistering the work in the country of origin if there is a local Registry,
at the London Office if there is not. Proprietorship in registered
lonial copyright can be asserted in any Court in the Empire by procing a copy of entry issued by the Copyright Office of the country
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SOCIAL CONDITION AND CHARITIES

N one particular New South Wales, in common with all the provinces of Australasia, differs greatly from other countries, especially ose of the Old World: wealth is more widely distributed, and the olent contrast between rich and poor, which seems so peculiar a phase old-world civilisation, finds no parallel in these southern lands. hat there is poverty in the colonies is unhappily true; but no one in ustralasia is born into conditions from which it is not easy to escape; nd that hereditary pauper class, which forms so grave a menace to the eedom of many States, has, therefore, no existence here.

It is estimated that in the United Kingdom nine persons in every undred possess property to the amount of £100; whereas in the olonies the proportion is not less than 16 per cent. This bare statement shows the great difference between the conditions of life in ustralasia and in the richest country of Europe. No poor rate is evied in the colonies; and although from time to time the assistance f the State is claimed by, and granted to able-bodied men who are nable to find employment, that assistance has hitherto generally taken he form of wages and rations allowed for work specially provided by he State to meet a condition of the labour market which is abnormal.

The chief efforts of the authorities in the cause of charity are directed owards the rescue of the young from criminal companionship and emptation to crime, the support of the aged and infirm, and the care of the imbecile or insane; and in granting assistance to private institutions for the cure of the sick and injured, and to societies established for the purpose of relieving the pressing necessities of those of the poorer classes who, through improvidence, and lack of employment by the breadwinner of the family, find themselves temporarily in want. Even where the Government grants aid for philanthropic purposes, the management of the institutions supervising the expenditure is in private hands; and in addition to State-aided institutions, there are numerous other private charities whose efforts for the relief of those whom penury, sickness, or misfortune has afflicted are beyond all praise.

The rescue of the young from crime is attempted by means of Industrial Schools, where children who have been abandoned by their natural guardians, or who are likely, from the poverty or incapacity of their parents, to be so neglected as to render them liable to lapse into crime, are taken care of, educated, and afterwards apprenticed to useful

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ber of admissions, discharges, and deaths for the past ten

Total Patients under treatment.	Number Discharged as cured, etc.	Deaths.		Number of Patients at the close of year.
		Number.	Per cent. under treatment.	
15,176	12,569	1,424	9·4	1,183
16,865	14,077	1,477	8·8	1,311
17,041	14,386	1,361	8·0	1,294
19,096	16,183	1,577	8·3	1,336
19,214	16,372	1,440	7·5	1,402
20,424	17,461	1,498	7·3	1,465
23,582	20,259	1,682	7·1	1,641
25,497	21,960	1,829	7·2	1,708
26,697	22,915	2,059	7·7	1,723
27,643	23,747	2,016	7·3	1,880

umber remaining at the close of the year may be taken as ting the average number resident. It will be seen from the table increase in the number of patients has been fairly regular, so proportion of the population to be found in hospitals is about e in each year, the average in 1897 being 1·4 per thousand.

leath rate per 100 persons under treatment during the past ten as 7·7, while the rate for 1897 was 7·3, or 0·4 below the l average. The rate for each year is stated above. The death ospitals in New South Wales, compared with those of Europe, ubtedly very high. The number of fatal cases is swollen inclusion of the deaths of persons already moribund when d, and of persons in the last stage of phthisis. It has elsewhere inted out that deaths from accidents form a very considerable on of the total number registered—a circumstance due to the f the occupations of the people, and the dangers incidental to ng enterprise. A large majority of the accidents that occur, ot immediately fatal, are treated in the hospitals; and, indeed, stitutions, especially in country districts, are for the most intained for the treatment of surgical cases. When these cir- ces are taken into consideration the cause of the apparent excess s in the hospitals of the colony will at once be understood.

ications for admission into the metropolitan hospitals are made Government Medical Officer, and it is the duty of that officer n the cases to the different hospitals and asylums in accor- ith the nature, severity, and special character of the ailments hich the patients are suffering, and the accommodation available various institutions. The number of applications dealt with 1897 was 11,503, as compared with 12,251 in the preceding year. applicants during 1897, 1,872 received orders for the Coast l, 1,270 for the Prince Alfred Hospital, 1,023 for the Sydney

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ther institutions in different parts of the colony, receive help from he State; but they are maintained principally by private contributions. The management of these, and, indeed, of almost all institutions for the elief of the sick, is in the hands of committees elected by persons subscribing towards their support. In addition to the above, there are several institutions under the control of the Roman Catholic body, and supported entirely by private charity. At the City Night Refuge and Soup Kitchen there were no less than 96,061 meals given during 1897, and shelter was provided in 44,052 instances.

Destitute Children.

The problem of dealing with destitute children and those liable from their environment to become criminal is naturally surrounded with very great difficulty, and its solution was attempted many years ago by the establishment of the orphanages at Parramatta and the destitute children's asylum at Randwick, as well as the Vernon Training Ship for boys, and the Biloela Reformatory and Industrial School for girls. The system of crowding children in large establishments was rightly considered as open to many grave objections, and in 1880 a scheme of separate treatment was inaugurated. Accordingly an Act was passed by the Legislature, empowering the formation of a Board, to whose charge the destitute or neglected children of the colony were entrusted.

The State Children's Relief Board commenced its operations on the 5th April, 1881, with 24 boys and 35 girls, or a total of 59 children. During the seventeen years of its existence, the Board has dealt with no less than 9,053 children, who have been removed for boarding out from the State institutions of the colony, and others partly supported by public contributions. Of that number, 5,344 children had been either discharged to their parents or otherwise removed from the control of the Board, so that there were remaining under its charge on the 5th April, 1898, 3,709, of whom 2,083 were boys and 1,626 were girls. Of these children, 2,621 (inclusive of 15 children in hospitals, 25 at the depôt, and 147 in cottage homes), or 1,442 boys and 1,179 girls, were boarded out to persons deemed to be eligible after strict inquiry by the Board. The rates of payment range from 5s. to 10s. per week, the higher rates being paid for infants under one year, who require more than ordinary care. A strict supervision is exercised by the officers of the Board in order to see that the children are not ill-treated or neglected, and in addition to this there are voluntary lady visitors in all parts of the colony who keep a constant watch upon these children of the State. Besides the boarded-out children, there were also, in April, 1898, 149 who had been adopted without payment, and who were, in the main, treated by their foster-parents as though they were their own kin; 69 of these adopted children were boys, and 80 were girls. Then there were 572 boys and 367 girls, or 939 children in all, who were apprenticed but were still under the control of the Board. It is asserted that the practical success of the boarding-out system is exemplified by the expansion shown in these figures. About fifteen hundred children have grown up and been taught useful trades and profitable occupations, many of whom would otherwise have drifted into the criminal or pauper population.

During the year, 1,788 applications were received by the Board for State Children. Of these applications, 1,259 were inquired into by the Inspectors attached to the Department, with the result that 927 were approved of, and 332 were refused—in most cases because the character of the applicants did not appear to come up to the standard required by the Board. The system of placing delicate young children out to nurse with healthy matronly women in the country districts has been found to work well. In April, 1898, there were 69 such children under control, at a total cost of less than £1,500; and there were 149 children under the control of guardians, by whom they had been adopted, or to whom no subsidy was paid by the State. Of the apprentices, nearly all the girls were in domestic service, while the greater proportion of the boys were with farmers, orchardists, storekeepers, and artisans in healthy country districts. Taken as a whole, the apprentices are turning out remarkably well, and it is very seldom there are any serious complaints either from the children or from their guardians. At the close of April, 1898, there were 25 children in the depôt, 15 in hospitals, and 147 at the cottage homes for invalids at Parramatta and Mittagong. Although as many as 1,134 children passed through the Central Home at Paddington during the year, owing to the system of prompt removal to the country, the average daily number at that institution was not more than 24. During the year, 17 boys and 7 girls died. It is claimed that the system pursued by the Board of extending to the dependent children of this country the privileges of family life and home training in place of the monotonous and artificial style of living in large asylums has been attended with successful results, and the cost to the State, equal to £13 19s. 10d. per child dealt with, or £13 10s. 6d. after deducting parents' contributions, can scarcely be looked upon as excessive.

The number of children under the control of the Board in April of each year since 1881 is shown in the following table:—

Year ending April.	Boys.	Girls.	Total.	Year ending April.	Boys.	Girls.	Total.
1881	24	35	59	1890	1,380	904	2,284
1882	40	63	103	1891	1,417	952	2,369
1883	119	188	307	1892	1,390	1,006	2,396
1884	232	320	552	1893	1,472	1,065	2,537
1885	564	462	1,026	1894	1,606	1,203	2,809
1886	779	587	1,366	1895	1,822	1,352	3,174
1887	1,099	703	1,802	1896	1,954	1,502	3,456
1888	1,202	758	1,960	1897	2,085	1,586	3,671
1889	1,316	857	2,173	1898	2,083	1,626	3,709

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than could be the case in crowded institutions. The number of destit children in State institutions, including boarders paid for by t Government, at the end of each of the past ten years, was as follow

Year.	Number.	Year.	Number.
1888	2,091	1893	2,502
1889	2,218	1894	2,708
1890	2,077	1895	3,041
1891	2,111	1896	3,240
1892	2,239	1897	3,165

From 1890 to 1896 the number steadily increased, but 1897 sh a slight falling off as compared with 1896.

Four industrial schools and reformatories are maintained by State. These are the Parramatta Industrial School and the Shaftesb Reformatory for girls; the Sobraon training-ship for boys; and Carpenterian Reformatory at Eastwood, also for boys. The training for a long time was used practically as a reformatory as well as an ind trial school, for the absence of a reformatory led to many boys appea before the Courts being sent to the ship. In August, 1895, howe the Carpenterian Reformatory was opened on part of the Brush F Estate, and arrangements were made to receive therein criminal b and to subject them to proper discipline and to teach them us trades. The following table shows the number of children confine the industrial schools and reformatories during the last ten years. ship used as the training school for boys was formerly the Vernon

Year.	Vernon or Sobraon.	Parramatta.	Shaftesbury Reformatory.	Carpenterian Reformatory.	Total.
1888	209	93	28	......	330
1889	227	87	42	......	356
1890	208	64	32	......	304
1891	230	80	32	......	342
1892	278	78	25	......	381
1893	303	103	22	......	428
1894	349	117	2	......	468
1895	380	120	1	30	531
1896	331	124	15	91	561
1897	321	113	18	81	533

following table gives the number of destitute children in other and private institutions during the ten years ended 1897 :—

Randwick Asylum.	Benevolent Asylum.	Infants' Home, Ashfield.	State Children's Relief Department.		Other Institutions.	Total.
			Boarded out.	In Cottage Homes.		
246	168	56	1,341	108	14	1,933
216	151	118	1,348	117	25	1,975
212	161	62	1,373	116	16	1,940
183	147	52	1,389	122	23	1,916
176	153	60	1,464	143	558	2,554
172	119	42	1,741	153	579	2,806
148	83	59	1,948	146	842	3,226
146	135	50	2,266	162	857	3,616
146	147	43	2,488	152	879	3,855
155	116	55	2,434	147	925	3,832

the first five years shown in the foregoing statement the number itute children averaged 2,064 per annum, or 1·84 per thousand total population; while for the last five years the yearly average ,467, or 2·72 per thousand. The actual increase of destitute n, however, is not so great as these figures show, for in the early the period the returns received from the private institutions ot so complete as they are now.

appended table shows the number of children under 15 years of intained in reformatories and in charitable institutions of a public ivate character at the end of 1897. In the figures relating to ment asylums are included the 2,621 children supported by te Children's Relief Department:—

Institutions.	Children.
Government	3,165
Public	624
Church of England	21
Roman Catholic Church	522
Wesleyan	21
Salvation Army	12
Total	4,365

number of children supported by public and private charity at d of 1896 was 4,416, so that there was a decrease of 51 during elve months. The deaths of children in charitable institutions numbered 149, the total for 1896 being 171. In the number h year the deaths of boarded-out children are included.

DESTITUTE ADULTS.

The number of destitute adults, or persons 15 years of age an who were inmates of the various asylums of the colony at the c the year 1897, was 4,879, of whom 3,438 were males, and 1,441 fe The great majority of those in the asylums are persons o advanced years who are unable to work. The inmates of the Ben Asylum, Sydney, however, and of a number of similar institution an exception to this rule, as a large proportion of them are de women who use the institutions as lying-in hospitals. The num males and females in the various institutions, with the ratio per 1 adult population at the close of each of the past ten years, are app In the earlier years the returns may not have been quite co but when every allowance has been made on this score, it m confessed that there has been a serious increase in the num admittedly destitute persons since 1891. This spread of dest does not seem to have been due to any diminution in the num the people helped by the friendly societies, and it is difficult to mine the exact causes of this condition of affairs without a investigation of the whole subject far below the surface of the st which have been furnished by the institutions. No doubt the of the Royal Commission on Charities will throw some light matter when it is presented to Parliament. Meanwhile, as will from the figures given on page 858, New South Wales has a proportion of indoor paupers than Scotland, and it is not far be of England and Wales, although in the United Kingdom ther course, a large amount of systematic outdoor relief :—

Year.	Males.	Females.	Total.	Per 1,000 of Adult Po	
				Male.	Female.
1888	1,944	740	2,684	5·3	2·6
1889	2,038	800	2,838	5·4	2·7
1890	2,165	783	2,948	5·5	2·6
1891	2,239	850	3,089	5·5	2·7
1892	2,827	1,078	3,905	6·8	3·3
1893	2,915	1,077	3,992	6·8	3·3
1894	2,744	1,171	3,915	6·3	3·4
1895	3,004	1,247	4,251	6·7	3·6
1896	2,935	1,230	4,165	6·5	3·5
1897	3,438	1,441	4,879	7·5	4·0

ıe following shows the number of adults remaining in the various ɛvolent Asylums at the close of the years 1888 to 1897 :—

	Sydney (Pitt-street).	Newington.	Liverpool.	Parramatta.			Bookwood.	West Maitland.	Newcastle.	Other Asylums.	Total.
				George-street.	Mac-quarie-st.	Cottage Homes.					
	97	397	778	721	286	...	...	36	26	343	2,684
	83	454	801	771	283	39	...	37	32	338	2,838
	92	462	789	867	288	42	...	39	28	341	2,948
	103	491	793	938	284	62	...	44	34	340	3,089
	110	519	836	1,000	312	43	...	51	41	993	3,905
	65	577	887	984	332	43	202	53	40	809	3,992
	66	639	785	995	321	43	379	42	40	605	3,915
	105	637	844	1,076	296	44	427	46	39	737	4,251
	105	662	779	982	345	44	563	48	39	598	4,165
	88	666	1,093	1,050	371	43	585	43	46	894	4,879

he Liverpool Asylum and the two large institutions at Parramatta homes for males; the Benevolent Asylum, Sydney, is for females; the institution at Newington is used chiefly for persons of this sex. and indigent married couples have the use of the Cottage Homes, ramatta, which were opened in March, 1889. Owing to the asylums Liverpool and Parramatta becoming overcrowded, the Government, ing the latter part of 1892, decided to utilise the buildings erected ookwood several years previously, and intended for a reformatory boys, though never used for that purpose; consequently, in March, 3, the premises were opened as an additional asylum for male ates, of whom there were 202 in the institution at the close of the r, and this number had increased to 585 at the end of 1897.

n the following table will be found the number of adult male and ale inmates of all charitable institutions from which information received at the close of 1897 :—

Institutions.	Males.	Females.	Total.
Government	3,171	662	3,833
Public	141	355	496
Church of England	33	32	65
Roman Catholic	36	340	376
Salvation Army	48	49	97
Hebrew	9	3	12
Total	3,438	1,441	4,879

The above total of 4,879 is higher by 714 than the total for 18 higher by 628 than the total for 1895, which had hitherto be highest on record. During 1897 the deaths of 749 adults took the various institutions.

Adding together the numbers of adults and children in o show the proportion, as compared with the whole population, destitute in the colony, the ratios per 1,000 for the last ten ye found to be as follow :—

Year.	Children.	Adults.	Total.	Per 1,000 of—		
				Children under 15 years.	Adult Population.	T Pop
1888	2,263	2,684	4,947	5·6	4·1	
1889	2,331	2,838	5,169	5·6	4·2	
1890	2,244	2,948	5,192	5·2	4·3	
1891	2,258	3,089	5,347	5·1	4·3	
1892	2,935	3,905	6,840	6·3	5·3	
1893	3,234	3,992	7,226	6·8	5·3	
1894	3,694	3,915	7,609	7·7	5·1	
1895	4,147	4,251	8,398	8·4	5·3	
1896	4,416	4,165	8,581	8·8	5·2	
1897	4,365	4,879	9,244	8·6	5·9	

The proportion of indoor paupers to the whole population sh the above table is perceptibly increasing, and although still sma pared with the rate of Ireland, it is now equal to that of Engla Wales, and in excess of that of Scotland. The proportion of pop in the United Kingdom maintained in the workhouses and institutions of a similar character at the cost of the ratepaye as follows at the beginning of the year 1898 :—

England and Wales	7·0	per thousand.
Scotland	4·4	,,
Ireland	9·9	,,
United Kingdom	7·1	,,

as against 7·0 per thousand in this colony dependent upon th and private charity for support. There is, of course, a large outdoor relief in the United Kingdom which is not inclu figures. If this were taken into consideration the pro be:—England and Wales, 26·4 per thousand; Scotland, 22·1; and the United Kingdom, 25·5 per thousand.

he receipts and disbursements of the charitable institutions in the ay during the year 1897 were as shown below. The figures do not ude the money received and expended by several denominational itutions the financial condition of which is not made public:—

ipts :—	£	Disbursements :—	£
vernment aid	87,880	Buildings and repairs	8,936
ivate contributions	24,948	Maintenance (including salaries)	112,044
her sources	28,371	Other expenses	22,830
Total	£141,199	Total	£143,810

TREATMENT OF THE INSANE.

he treatment of the insane is dealt with under the head of Vital tistics. The average number of insane persons resident in hospital ing 1897 was 3,822, while the total number under care was 4,833. se numbers include those resident at the four licensed houses for the ane at Cook's River, Picton, and Ryde. The gross expenditure on pitals for insane, wholly supported by the State, during 1897, was 05,445, while the collections from private sources amounted to £14.500, ving a net cost to the Government of £90,945. The average weekly t per patient was 10s. 8¾d., without deducting collections, and 9s. 3d. er these were deducted, while the net annual expenditure per head of ulation was 1s. 4¾d. The total expenditure by the State on all titutions connected with the care of the insane, inclusive of the cost of intenance of patients in the Reception House, Darlinghurst, of the ount paid to the South Australian Government for the maintenance insane patients from the Broken Hill District, and of general penses, was £109,623, and the total collections amounted to £14,591, that the actual expenditure during the year was £95,032. The rangements by which a number of Government patients were maintained at the licensed house at Cook's River ceased at the end of 1894. few weeks previously all the Government patients were removed to e public institutions, the majority being sent to Rydalmere, where new rds had been erected ; thus, at that date, for the first time for twenty-ght years, the whole of the patients under the care of the Government re housed within the walls of its own institutions. The treatment ted out to the insane is that dictated by the greatest humanity, and e hospitals are fitted with all conveniences and appliances which odern science points out as most calculated to mitigate or remove the liction under which these unfortunates labour.

PROTECTION OF THE ABORIGINES.

A Board is in existence for the protection of the aborigin object of which is to ameliorate the condition of the blacks, exercise a general guardianship over them. There are also five s for the benefit of the aborigines. These are Cumeroogunga, on th Murray; Warangesda, on the Murrumbidgee, ; Brewarrina, o Darling; Brungle, near Gundagai; and Grafton. The three named stations were formerly under the control of a society call Aborigines' Protection Association, who were responsible to the for their administration. This association has now been dissolve some of the members of its Council have been appointed to the The natives at these settlements are comfortably housed, a encouraged to devote their energies to agricultural and occupations, and elementary education is imparted to the ch

The amount expended by the Government during 1897 for the of the aborigines was £16,733. This included an expendit £8,641 by the Board on Aborigines generally: £565 in conn with the Home for Aborigines at Grafton; £316 for the fa Aborigines travelling on the railway; and £2,648 in liquidating incurred by the Aborigines Protection Association in connectio the mission stations. The sum of £864 was expended on m attendance and medicine; £988 on school buildings, books, etc.; on blankets, clothing, etc.; and £52 for burial expenses. The abo are referred to at length in the chapter on Population.

TOTAL EXPENDITURE ON CHARITY.

The total expenditure of the State in connection with all f relief and in aid of hospitals, asylums for the insane, and other ch institutions, amounted in 1897 to £405,271; adding to this the of private subscriptions, donations, and other receipts of hospita the poor and the unfortunate benefited during the year to the of about £525,000. This sum, though not excessive in propor the population, appears to be large in view of the general we the colony, which should preclude the necessity of so many assistance.

GOVERNMENT LABOUR BUREAU.

Owing to the stoppage of public and private works consequen depression in the money market, there were, in the latter part of a large number of persons in the colony who, though able and to work, were unable to find any work to do. So great an amo this kind of distress was in existence that the Government felt co to take steps for the purpose of helping genuine workers to t ployment they were desirous of obtaining; and in February, 1 ar Bureau was formed, where those who wanted work done could ı labour, and those who desired to work could hear of whatever was to do. No charge is made for registration, and the matter of ı is left to be settled between the parties concerned. In the first of its existence the Bureau found employment for 8,154 persons, e second year for 10,349, in the third year for 16,380, in the h year for 25,903, in the fifth year for 13,718, and in the sixth for 7,817, making a total of 82,321 altogether. In addition to , it is estimated that about 5,000 persons indirectly obtained work igh the medium of the Bureau. Relief was given to those in ate want, in the shape of rations, of which 30,960 were issued ıg 1892-3, 52,525 in 1893-4, 41,884 in 1894-5, 318,200 in 1895-6, 15 in 1896-7, and 4,856 in 1897-8, at an average cost of about 1s. 6d.

Relief works carried on during 1895-6, for which payment was ı in rations, account for the large increase shown for that year. works had practically been completed before the beginning of the 1896-7. Private subscriptions have been disbursed among the r, and parcels of clothing distributed. The daily attendance of iployed at the Bureau is about 150, although on special occasions any as 700 may be present. The total expenditure on relief works he year 1897-8 was £3,470, as compared with £10,736 for the iding year. Expenditure in connection with the employment of on railway deviation works, forest-thinning, etc., is not included in ı amounts.

DEFENCE

NEW South Wales was garrisoned with British troops fr time of its foundation as a colony until the year 187 part of the years 1870 and 1871 the colony was without regular its defence being entirely in the hands of the Volunteer Force. I a local regular defence force was enrolled, comprising one bat Artillery and two companies of foot. The latter were disbanded following year; but the Artillery was strengthened by a second in 1876, and a third in 1877. In 1888 the permanent force, until that year had consisted of only one arm, was extended to corps of Submarine Miners and Mounted Infantry. The latter, h ceased to exist in 1890; but a fourth battery was added to the A and in 1891 a third arm was again raised in the form of a Medic Corps.

To supplement the Imperial troops in Australia, a voluntee was enrolled in 1854, Great Britain being then at war with The Act authorising the establishment of this force was 18 Vic. The original strength of the corps was one troop of Cavalry, one of Artillery, and six companies of foot, called the 1st Regiment South Wales Rifles; but with the termination of the Crimean Volunteers practically ceased to exist. A few years later, i a second force was enrolled, consisting of one troop of M Rifles, three batteries of Artillery two being stationed at and one at Newcastle—and twenty companies of Infantry, 1 of which were recruited from Sydney and its suburbs, and the country districts: the total strength of all arms bein 1,700 men. The existence of the Mounted Rifles was br they were disbanded in 1862, and more Artillery raised in thei In the following year a Naval Brigade was enrolled to a the defence of the colony by sea. In 1868 the military fo reorganised under the Volunteer Regulation Act, passed towa close of the previous year, each man receiving a grant of 50 a land for five years' efficient service. The land orders, howeve abolished in 1874, and a direct system of partial payment intr In 1878 a further reorganisation of the Volunteer troops of the took place in accordance with a plan drawn up by Sir William and the present force is serving under the Act of 1867 as ame that year. A corps of Naval Artillery Volunteers, who were to

ion, but only an allowance for instruction and incidental
raised in 1882, and it was followed a few years later by
ies of military reserves, comprising all the principal arms,
ooting; but all were gradually disbanded or merged in the
forces of the colony, until at the end of 1895 the small
cottish Rifles was the only one which was strictly entitled
as a Volunteer corps. In 1896, however, three rifle corps,
e Irish Rifles, the St. George's Rifles, and the Australian
raised. The Scottish and Irish Rifles comprise the 5th
he Australian Rifles, the 6th Regiment; and the St.
es, the 7th Regiment. During 1897 two new corps of
re enrolled, viz., the First Australian Volunteer Horse,
way Volunteer Corps. A "National Guard," consisting
eers of the colony, or men who have served elsewhere, has
blished.

efence forces of the colony at the end of 1897—exclusive
Reservists to the number of 1,751—numbered 7,765
en, distributed as follows:—

ops:—	
Staff	8
ff	11
taff	81
	443
bmarine Miners)	27
Corps	10
Corps	11
al	591
Troops:—	
	385
es	373
y	134
llery	488
ield	118
Miners	75
	75
	2,462
Corps	58
Corps	112
l	4,280

Volunteers:—	
Australian Volunteer Horse	503
Infantry—	
Australian Rifles	565
National Guard	110
St. George's Rifles	513
Scottish Rifles	229
Irish Rifles	196
Railway Volunteer Corps	164
Total	2,280
Honorary:—	
Chaplains	15
Medical Officers	20
Total	35
Naval Volunteer Force:—	
Naval Defence Force Staff	4
Naval Brigade	328
Naval Artillery Volunteers	242
In charge of Torpedo Boats	5
Total	579
Grand Total	7,765

PERMANENT TROOPS.

strength of the Military Forces of the colony on the 31st
97, was 7,186, or 346 below the establishment. The
roops numbered 591 of all ranks. The Headquarters
Ordnance Staff were, of course, all located in Sydney.
rvice Corps, Medical Staff Corps, and Submarine Miners

are all stationed in the Metropolitan District, where are also lo
Artillery, with the exception of the small garrisons manning t
in the South Coast and Northern Districts. The rates of pay
Artillery, exclusive of allowances, were on the 31st December,
Officer commanding, £730 ; lieutenant-colonel, £420 ; majors,
captains, £321 ; lieutenants, £180 to £216 ; warrant-officers,
to 9s. 9d. per diem ; sergeant-majors and quartermaster-sergeants
to 7s. 1d. per diem ; sergeants, from 4s. to 6s. 10d. per diem ; co
3s. 6d. to 3s. 10d. per diem ; bombardiers, 3s. 2d. per
trumpeters, 2s. 3d. per diem ; master gunners, 6s. 10d. to 7s. 10d. pe
gunners, 2s. 3d. per diem. The Submarine Miners are paid as foll
Officer commanding, £384 ; sergeants, from 7s. 4d. to 8s. 4d. pe
corporals, from 5s. to 6s. 4d. per diem ; sappers, 4s. per die
bugler, 2s. 3d. per diem. The Artillery man the batteries g
the harbours of Sydney, Botany Bay, Wollongong, and New
mount guard at the vice-regal residence, and perform such other
as usually appertain to a garrison. The troops are a fine
men. The minimum height at which recruits are accepted is 5
for drivers, and 5ft. 8in. for gunners.

The British military authorities afford facilities to New South
officers to gain a better knowledge of the duties of their professi
they could acquire in the colony, by sanctioning their atta
to corps serving in India. These facilities have on several oc
been taken advantage of, and an insight into the routine of th
cantonments has been gained, as well as actual experience of the
campaigning which is often going on in that country. Anot
portant step in the direction of securing efficiency in the defence
of the colony was taken in 1899, when a detachment of New
Wales Lancers was sent to England to undergo a period of t
at the great military encampment at Aldershot. It has al
suggested that there should be a regular interchange of troops b
England and the colonies, and no doubt this suggestion wi
practical shape in the near future.

PARTIALLY-PAID AND VOLUNTEER TROOPS.

The Partially-paid Troops and Volunteers of the colony co
seven arms in addition to the honorary staff of chaplains and
officers, the total strength of the force being 6,560 men of all r
shown in the preceding table. The Medical Staff Corps was r
1888, and originally consisted of one company, a second being
in 1893. The partially-paid portion, numbering 112, is stati
Sydney.

The cavalry regiment known as the New South Wales Lanc
first raised in 1885 as a volunteer reserve corps, under the name
Light Horse; but in 1888 the men were merged in the partial
troops, under their present designation. They provide their own

uipment, their uniform and arms being supplied by the Government. egiment is distributed throughout four districts, as follows:—

Sydney and Suburbs	99
Southern District	47
South Coast District	47
Northern District	200
Total	393

like the Lancers, the Mounted Rifles were directly enrolled in as a partially-paid body, being strengthened by the inclusion of a of the Light Horse already alluded to. They now number 381, buted as follows:—

Western District	94
Northern District	91
Southern District	151
South Coast District	45
Total	381

e First Australian Horse were raised in 1897, and at the end of ear numbered 504 officers and men, distributed as follows:—

Sydney and Suburbs	3
Southern District	224
Western District	54
South-western District	48
Northern District	175
Total	504

e Artillery consist of 622 men of all ranks, of whom 134 com- the field batteries. They were first enrolled in 1867, when 4 ries, one of which was a field battery, were formed. In 1885 an id force of four batteries was raised as a reserve, but two of these broken up in 1892, and the others included in the partially-paid , forming a second field battery. In the following year the Volunteer batteries were united with the permanent one to form the Brigade sion Field Artillery. The other batteries were designated the Second ison Division Artillery, the First Garrison Division being the per- nt force. The men are distributed over three districts, the strength ch being:—

Sydney	416
Northern District	117
South Coast District	89
Total	622

e Engineers are located in Sydney. As originally formed in , they consisted of one field company. Torpedo and signalling were recruited ten years later, and in 1890 another field com- was raised. In 1893 the whole force was united with the perma- Submarine Miners to form a corps of Engineers. The torpedo and lling corps were respectively designated Submarine Miners and tricians, the regulars forming the permanent section of the first of corps. The Field Companies number 118 men of all ranks; and Volunteer Submarine Miners and the Electricians are each 75 strong.

banded, and Civilian Rifle Clubs formed, and these club
to include 1,751 men, were enrolled as a Reserve C
regiments in 1895. In 1894 the partially-paid regim
were strengthened by the absorption of the "Senior Ca
division of a cadet force established in connection with t
of the colony; the younger division, known as the Cade
numbering 3,294 youths, remaining under the control
of Public Instruction. As already stated, Volunteer
the Irish Rifles, Australian Rifles, and St. George's R
in 1896, the first-mentioned body, with the Scottish
the 5th Regiment, and the other corps, the 6th an
respectively; and in 1897 the Railway Volunteer Corps
this body being recruited from employees on the su
The reserve force has also been strengthened by the
National Guard, numbering 110, the members of whic
military experience either in regular or volunteer force
force is distributed over five districts, the strength of e

Sydney and Suburbs ....
Southern District ....
Western District ....
Northern District ....
South Coast District ....
Total..

The Army Service Corps was raised in 1881 under
Commissariat and Transport Corps, its designation be
years later. It comprises 68 officers and men, all of wh
in the metropolis.

Volunteers are admitted between the ages of 18 a
rank as efficient, the Artillery are required to att
whole-day parades, 6 out of 8 half-day parades, an
night parades and shot practice; the Engineers (Fiel

foregoing. Pay is granted to all ranks according to a sliding scale, ners, sappers, and privates receiving 8s. for each whole-day parade, for a half-day parade, and 2s. for a night parade. In addition to e sums, every Volunteer who passes through the musketry course qualifies as a marksman is granted 12s.; and, if he should qualify he end of the year as an efficient, a further sum of £1 12s., unless e a Submarine Miner, in which case he is granted £2 for efficiency £2 16s. for extra proficiency.

n 1880 the Imperial military authorities conferred upon the Senate ne Sydney University the privilege of annually nominating a student a cadetship at the Royal Military College, Sandhurst. Under ain conditions the Senate has also the privilege of nominating one lidate every year to a commission in the British Army.

NAVAL VOLUNTEER FORCE.

ith the object of strengthening the Imperial fleet on the Australian ion, and securing a naval force sufficiently strong to resist attack in event of war breaking out between Great Britain and a maritime er, the colonies of Australasia, a few years ago, entered into an ement with the Imperial Government by which an Auxiliary ldron of seven fast and powerful cruisers and gunboats was built for asive service in Australian waters. The combined fleets number no than sixteen vessels, and under the circumstances it is unneces- that New South Wales should have any navy of its own, the only s of war which it possesses being two small torpedo boats—the eron and the Avernus. The colony, however, has enrolled in service two bodies of naval volunteers, who receive a small annual nent, and who would prove very useful as a reserve from which s could be partly drawn for the three vessels of the Auxiliary adron which are laid up in times of peace.

he first of these bodies is the Naval Brigade, which was enrolled in 3. It consists largely of time-expired seamen of the Royal Navy, harged from the ships on the Australian Station. At the present there are no facilities for drilling the men at sea, and in the neuvres hitherto carried out they have mostly been employed as a t artillery land force. The Brigade consists of six companies, com- ing 18 commissioned officers, 10 other officers, 21 petty officers, and men classed as A.B. Of this force, 275 are stationed in Sydney and t Newcastle.

he other arm of the naval service is known as the Naval Artillery unteers. This body was organised in 1882, and for the first ten s received no payment, the Government merely supplying arms and orms, and annually allowing a sum for instruction and incidental enses; but in July, 1892, the corps was included amongst the ially-paid forces of the colony. The men have been trained in the of the torpedo, and would be found serviceable for the defence of harbour should a hostile fleet evade or overcome the British and

Australian war-vessels. The strength of the corps is 242 me
ranks, including 16 officers and 26 petty officers, and 200
In addition to these there are five men belonging to the corps
in charge of the Acheron and the Avernus. There are also fo
officers, bringing the total strength of the naval forces up to 57
ranks.

THE IMPERIAL FLEET.

The headquarters of the Imperial Fleet and the Australasian A
Squadron are situated at Port Jackson, under an arrangement
Imperial authorities, by which the Government of the colony un
to give up Garden Island for the purposes of a naval station,
erect thereon the requi[illegible]gs, as well as to provide certai
accommodation required for t[illegible]ar-vessels in the harbour. I
deration of this it was agreed that Sydney should be the head
of the Australian Fleet, and that the Imperial Government sho
up all claim to certain lands and buildings owned by them in the
including the Paddington Barracks, the Domain, and Botanic G
and the old Commissariat Stores, as well as other valuable prope

The following is a list of the Imperial war-vessels now on t
tralasian station under Rear-Admiral Pearson. The Penguin an
are engaged in surveying service :—

Name.	Class.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armament.	Speed.
							Guns.	
		tons.		ft. in.	ft. in.	ft. in.		knots.
Royal Arthur.	Twin-screw cruiser, 1st class, protected	7,700	10,000	24 10	360 0	60 8	One 9·2-in. B.L., 12 6-in. B.L. (Q.F), 12 6-Pr., 5 3-Pr., 7 Nordenfeldt.	19·75
Porpoise.	Twin-screw cruiser, 3rd class.	1,770	3,500	15 4	225 0	36 0	Six 6-in. 5-ton B.L., V.C.P., 8 3-Pr., 2 Nordenfeldt.	16·5
Mohawk.	Twin-screw cruiser, 3rd class.	1,770	3,500	15 7	225 0	36 0	Six 6-in. 5-ton B.L., V.C.P., 8 3-Pr., 2 Nordenfeldt.	16·5
Royalist.	Screw cruiser, 3rd class.	1,420	1,510	16 11	200 0	38 0	Two 6-in. 4-ton B.L.R., 10 5-in. 38-cwt. B.L.R., 4 M., 1 L.	13·1
Ring-dove.	Screw gun-boat, 1st class.	805	1,200	13 2	165 0	31 0	Six 4-in. 25-cwt. B.L., 2 3-Pr., 2 Nordenfeldt.	12·9
Goldfinch	Screw gun-boat, 1st class	805	1,200	13 3	165 0	30 0	Six 4-in. 26-cwt. B.L.R., 2 Q.F. Hotchkiss, 2 M.	13·0
Torch ..	Screw sloop ..	960	1,100	14 6	180 0	32 6	Six 4-in. Q.F., 4 3-pr. Q.F. Hotchkiss, 2 0·45-in. Maxim.	13·25
Penguin.	Screw sloop ..	1,130	700	14 0	180 0	38 0	Two 64-pr. M., 1 L., 2 M.	10·0
Dart	Screw yacht..	470	250	12 11	133 0	25 2	2 L., 2 M.	

M.L.R. Muzzle-loading rifled guns; Q.F., Quick-firing guns; M., Mach
under 15 cwt.; B.L.R., Breech-loading rifled guns; V.C.P., Vava

Royal Arthur has a protective deck of steel, varying in thick-
m 1 to 5 inches. The 6-inch guns are also enclosed in case-
f steel 6 inches thick.

pportunity offers, the Admiral on the station is empowered to
mmissions, for periods not exceeding six months, to officers of
al forces of the colonies, in order that they may gain some
ice of the conditions under which modern naval warfare is prac-
Six cadetships and three engineer studentships in the Imperial
re given annually to Australian boys, who must not be less than
more than 15½ years of age to qualify for the former, and not
n 14 nor more than 17 years of age for the latter appointments.
lets undergo a course of instruction for two years on board the
ia training-ship before they receive a commission.

THE AUSTRALASIAN AUXILIARY SQUADRON.

r the provisions of the Australasian Naval Force Act, which was
l to on the 20th December, 1887, all the colonies have entered
agreement with the British Government for the payment of a
towards the maintenance of an Australian Auxiliary Squadron.
ual subvention payable by the colonies amounts to £91,000 for
ance and £35,000 as interest charge on the cost of construction
ate of 5 per cent. per annum, making a total of £126,000, of
New South Wales, according to population, paid £37,820 for
r 1897–8. The fleet, which entered Port Jackson on the 5th
ber, 1891, consists of five fast cruisers and two torpedo gunboats.
e, three cruisers and one gunboat are always kept in commission,
ainder being held in reserve in Australasian ports, but ready
mission whenever circumstances may require their use. The
in reserve at the present time are the Ringarooma and the
ang ; while the Katoomba is used as the guardship of the
. The agreement is for a period of ten years, and is then, or at
of any subsequent year, terminable, provided two years' notice
ve been given. The Australasian Governments have no voice
er in the management of the vessels, nor any control over their
nts. On the termination of the agreement the vessels will
the property of the Imperial Government. The strength of the
Australian waters before the Australasian Squadron was built
tained.

culars respecting the vessels of the Australasian Auxiliary
n will be found below. The Boomerang and Karrakatta are
as torpedo gun-boats ; all the other vessels are third-class screw
. The deck armour over machinery space is 2 in. and 1 in., and

**in conning towers 3 in., except in the case of the torpedo boa
towers of which have 1-in. armour :—**

Name.	Displacement.	Indicated horse-power.	Draught of water extreme.	Length.	Beam.	Armament.		Speed.	[illegible]
						Guns.	Torpedo tubes.		
	tons.		ft. in.	ft. in.	ft. in.			knots	to
Katoomba	2,575	7,500	17 6	265 0	41 0	Eight 4·7 Q.F. guns, eight 3-pr. Q.F. guns, one 7-pr. M.L.R. gun (boat and field), four 4·45 in. 5 barrel Nordenfeldt.	4	16·5	3
Ringarooma ..	2,575	7,500	17 6	265 0	41 0	do ...	4	16·5	3
Mildura	2,575	7,500	16 6	265 0	41 0	do	4	16·5	3
Wallaroo	2,575	7,500	17 3	265 0	41 0	do ..	4	16·5	3
Tauranga	2,575	7,500	17 6	265 0	41 0	do ...	4	16·5	3
Boomerang ..	735	3,500	10 8	230 0	27 0	Two 4·7 in. Q.F. guns, four 3-pr. Q.F. guns.	3	*18·75	1
Karrakatta ..	735	3,500	10 9	230 0	27 0	do ...	3	*18·75	1

* This speed can be increased until, under favourable conditions, for a short period, a
of 21 knots can be obtained. Q.F. Quick-firing guns. M.L.R. Muzzle-loading rifled ga

In the event of any of the squadron being lost the vessel i
replaced by the British Government.

FORTIFICATIONS.

At various points along the coast of New South Wales, e
fortifications have been constructed, and Sydney, protected as i
two lines of defence, is regarded as almost impregnable. Bota
is strongly fortified, and the works there form the southern def
the metropolis; while to the north, Newcastle, the great coal por
colony, has also been rendered as secure as possible against atta
down the coast, to the south, fortifications have been constructe
towns of Bulli and Wollongong.

Fortifications have been erected at King George's Sound and
day Island at the joint cost of the five Australian colonies.
first case, one-fourth of the cost is borne by Western A

ıpplies the garrison), and three-fourths by the other colonies on
ion basis; while, in the other, each of the colonies contributes
to the number of its inhabitants. It is probable that the
; strategic points of Hobart and Port Darwin will be forti-
r a somewhat similar agreement in the near future.

EXPENDITURE ON DEFENCE.

:penditure by the State during 1897–8, from the Consolidated
on defence works and the Permanent and Volunteer Forces,
l to £233,244, distributed as follows:—

	£	£
and Partially-paid Military Forces	....	177,478
:es	....	9,264
'fence:—		
eorge's Sound	1,046	
ıy Island	2,403	
ontribution	37,820	
Total	....	41,269
enditure:—		
ssociations	1,845	
[aval House	200	
y Secretary	2,069	
y Pensions	1,119	
Total	....	5,233
Grand total	....	£233,244

ver opinion may be entertained of the present condition of the
ıf the colony, there can be no doubt that a very large sum of
s been expended upon them. The details cannot now be
d respecting the earlier defences of the harbour of Port Jackson,
ort Phillip, where the Observatory now stands, Fort Macquarie,
Denison, which, with the batteries at Dawes' Point, Kirribilli,
Macquarie's Chair, were thought to render Sydney almost
ble some forty years ago, when the ponderous artillery now in
not been invented. The returns of expenditure for defence
since the assumption of responsible government, are, however,
and are appended hereto. It will be observed that during the
and a half years no less than £4,809,891 was expended from

the Consolidated Revenue, or an average of £115,901 per annum, for these services:—

Year.	Military Expenditure (including Buildings and Works of Defence).	Naval Expenditure.	Total.	Year.	Military Expenditure (including Buildings and Works of Defence).	Naval Expenditure.	Total.
	£	£	£		£	£	£
1857	31,824	538	32,362	1879	92,216	5,219	97,435
1858	23,974	3,296	27,270	1880	72,712	5,683	78,395
1859	18,376	6,089	24,465	1881	80,215	5,810	86,025
1860	30,373	2,910	33,283	1882	96,387	12,858	109,245
1861	68,085	2,275	70,360	1883	117,554	15,202	132,756
1862	24,188	4,330	28,518	1884	147,725	14,960	162,685
1863	18,845	1,943	20,788	1885	224,318	18,895	*243,213
1864	25,789	1,054	26,843	1886	200,488	18,696	219,184
1865	14,522	2,508	17,030	1887	156,681	6,670	163,351
1866	18,167	3,522	21,689	1888	158,479	9,210	167,689
1867	23,762	3,772	27,534	1889	206,457	11,582	218,039
1868	30,824	4,096	34,920	1890	224,352	11,195	235,547
1869	31,278	3,570	34,848	1891	275,343	12,085	287,428
1870	22,241	3,612	25,853	1892	240,258	81,746	322,004
1871	31,952	3,964	35,916	1893	205,425	13,925	219,350
1872	43,055	3,995	47,050	1894	219,158	53,200	272,358
1873	48,567	4,886	53,453	†1895	109,498	42,592	152,090
1874	81,223	5,034	86,257	1895-6	173,580	47,546	221,126
1875	39,092	5,213	44,305	1896-7	166,119	46,895	213,014
1876	62,385	5,548	67,933	1897-8	185,960	47,284	233,244
1877	117,263	5,565	122,828				
1878	87,590	4,618	92,208	Total ...	4,246,300	563,591	4,809,891

* Exclusive of £121,630, cost of sending Australian Contingent to the Soudan. † Six months.

In addition to the sums paid out of current revenue, a large amount of loan money has been expended in the erection of fortifications, which it is expected will serve for the protection of future generations of colonists as well as the present. The details of this expenditure are as follow:—

Previous to 1871........................ £80,805.

	£		£
1871........................	43,601	1886........................	61,814
1872........................	24,466	1887........................	8,350
1873........................	35,134	1888........................	122,296
1874........................	22	1889........................	56,440
1875........................	368	1890........................	46,962
1876........................	4,506	1891........................	111,896
1877........................	3,735	1892........................	54,478
1878........................	33,227	1893........................	17,128
1879........................	21,270	1894........................	15,183
1880........................	14,582	*1895........................	2,414
1881........................	22,640	1895-6........................	17,629
1882........................	39,757	1896-7........................	6,603
1883........................	24,819	1897-8........................	31,183
1884........................	4,683		
1885........................	54,729	Total........................	£960,740

* Six months.

imated that the present value of the defence works erected in h Wales is about £868,000.

source of expenditure to the colony is that of the Naval Port Jackson, to which reference has been made under the the Imperial Fleet. In carrying out the works at Garden the alterations at Kirribilli Point the following expenditure ncurred :—

	Amount.	Year.	Amount.
	£		£
	642	1893	34,669
	33,928	1894	33,796
	15,431	*1895	9,210
	52,013	1895–6	4,345
	15,574	1896–7	Nil.
	42,768	1897–8	2,964
	42,201		
	23,373	Total	£310,914

* Six months.

appears that the total amount spent by the colony of New les for defence purposes from the beginning of the year e 30th June, 1898, was £6,249,590, or an average of about per annum. The items which make up this amount may be ed thus :—

	£
onsolidated Revenue	4,809,891
ans—Fortifications and Warlike Stores	960,740
Naval Station, Port Jackson	310,914
f Land alienated in virtue of Volunteer Land Orders, puted at £1 per acre	168,045
Total	£6,249,590

NEW SOUTH WALES is slow to adopt a general government, notwithstanding the pressing nec step. In Victoria, Queensland, South Australia, and comprehensive systems of local government have been many years, and the benefits derived therefrom are rec by the Governments, but by the ratepayers whose pro The central Government is relieved of responsibility which form no part of its proper functions, while the though compelled to pay rates from which he was previou benefits which more than compensate for his direct pay

Under the system at present obtaining in New district, however populous, is compelled to become inc is only on the presentation of a petition, signed by at prospective ratepayers, and containing a larger numb than those attached to any counter petition, that a mu formed. Judged by past experience, this voluntary conducive to the adoption of a general system of local so long as the central Government continues to constru is evident that the residents benefited will submit t local management of their affairs.

In the course of the year 1894 a Bill was submitte tive Assembly, providing for the incorporation of the rated area of the colony into boroughs, municipal distric area of 400 square miles, and shires; but in conseque tion of a clause which they considered contrary to a v the Bill, the measure was abandoned by the Gover proposed by the Bill to alter the municipal year s from the 1st January to the 31st December; to alte

re and 2s. 6d. during the last five years; to submit certain ques-
such as the levying of a special rate, the rating on the capital or
nual value, and the raising of loans, to a general vote of the
yers; to levy local rates for works of local benefit; to expend on
iding or ward of a municipality the amount of rates collected
the residents of that riding or ward; to give power to erect
proof fences, to grant aid to hospitals, and to prevent destruction
; to take material for any kind of municipal work from any
n payment of compensation; and to raise the borrowing powers
times the total of the general rate.

the end of 1860 the total area incorporated was 409 square miles;
years this had increased to 649 miles only; in 1880 to 1,482
in 1890 to 2,387 miles; and in 1898 to 2,763 square miles—a
nsignificant total compared with the whole area of territory. The
ed figures give the incorporated and unincorporated areas at the
1898 in each of the three great divisions of the colony:—

Division.	Incorporated Area.	Unincorporated Area.
	square miles.	square miles.
Eastern	2,011	92,445
Central	494	86,163
Western	258	124,695
Total	2,763	303,303

addition to the ordinary form of municipal local government,
re various boards and trusts with local jurisdiction, to the opera-
f which allusion will hereafter be made. The control of water
and sewerage of the Metropolitan and Hunter districts is rele-
o separate boards. At Hay and Balranald there are irrigation
the formation of which was provided for by special Acts; the
ipal Councils constitute the trusts. Another trust, which was
shed at Wentworth, has been dissolved, and its powers assumed
Government, and the question of the dissolution of the Balranald
is also being considered. The Public Vehicles Regulation Act,
etropolitan and the Country Towns Water Supply and Sewerage
and the Fire Brigades Act, were all passed with the object of
ing the principle of local government, and boards have been
shed to carry out the provisions of some of these Acts.

ving out of consideration the expenditure on works of national im-
ce, the Government has, during the past thirty-eight years and a half,

expended no less than £30,996,100 on works of a purely local charact not including school buildings. Of this sum, £20,742,700 was laid out the country districts, and £10,253,400 in the metropolitan. The divisi of the colony into local government districts would not necessar be followed by an entire stoppage of the direct expenditure on wo of local interest by the central Government, but the larger portion the works now undertaken by Government would be left to the lo authorities, who, having to provide the expenditure, would probably that it is laid out to the best advantage. Adopting the two divisi of metropolitan and country, the expenditure on account of public wo in each since 1860 is given below. Out of the total metropoli expenditure, £7,140,900 wa [illegible] on tramways and water supply sewerage works, which a [illegible] es of revenue, while in the coun districts the cost of similar [illegible] ks totalled £1,176,700 only :—

Year.	Country districts.		Metropolitan District.		Total.	
	Expenditure.	Per Inhabitant.	Expenditure.	Per Inhabitant.	Expenditure.	Per Inhabit
	£	£ s. d.	£	£ s. d.	£	£ s.
1860-1880	5,649,382	....	1,065,410	....	6,714,792	......
1881	583,471	1 1 10	357,182	1 10 10	940,653	1 4
1882	704,892	1 5 5	702,696	2 17 8	1,407,588	1 15
1883	758,052	1 6 1	931,615	3 12 7	1,689,667	2 0
1884	940,858	1 10 8	669,209	2 9 5	1,610,067	1 16
1885	981,951	1 10 7	704,636	2 9 5	1,686,587	1 16
1886	868,923	1 6 0	767,906	2 11 1	1,636,829	1 13
1887	784,941	1 2 9	556,660	1 15 2	1,341,601	1 6
1888	904,477	1 5 9	344,414	1 0 8	1,248,891	1 4
1889	798,383	1 2 4	583,786	1 13 2	1,382,169	1 5
1890	874,077	1 3 10	444,723	1 4 0	1,318,800	1 3
1891	1,126,446	1 9 11	790,491	2 0 7	1,916,937	1 13
1892	1,034,686	1 6 8	563,015	1 7 9	1,597,701	1 7
1893	790,500	0 19 11	416,100	1 0 0	1,206,600	0 19
*1894-5	1,421,000	1 14 7	408,300	0 19 4	1,829,300	1 9
1895-6	1,048,200	1 4 1	215,700	0 10 7	1,263,900	0 19
1896-7	743,900	0 16 9	306,000	0 14 11	1,049,900	0 16
1897-8	728,600	0 16 1	425,600	1 0 5	1,154,9	

* Eighteen months ended June, 1895.

INCORPORATION OF THE CITY OF SYDNEY.

e City of Sydney was incorporated on the 20th July, 1842, and Sydney Municipal Council established during the same year, the on of aldermen taking place on the 9th November. Mr. John ing was the first Mayor. The city was first divided into six s, but at a subsequent adjustment the number was increased to , as at present. After a few years great dissatisfaction arose in inds of the citizens in regard to the manner in which the affairs e Council were carried on; a Select Committee of the Legislative cil was appointed in 1849 to inquire into the matter, and it ted in favour of the abolition of the Municipal Council, with a mendation that its powers should be vested in three Commissioners appointed for that purpose. This was not carried into effect until , when the Corporation was dissolved, and its powers were trans- d to a Commission, consisting of Messrs. G. Elliott, J. Rae, and arvall, who administered the affairs of the city from the beginning 54 to the end of 1857. The new Council came into existence at the ning of 1858. Mr. George Thornton was the first Mayor under ew order of things, and there were sixteen aldermen, two for each . By the present Act—Sydney Incorporation Act of 1879—the er of aldermen was increased to twenty-four, each ward having representatives, as is the case in the other municipalities.

SUBURBAN AND COUNTRY MUNICIPALITIES.

e Act by which the City of Sydney was incorporated contained no sion for the extension of the municipal principle to other localities; n 1843 the first step was taken towards the extension of the system e country districts by the incorporation under letters patent of pbelltown, Appin, Camden, Narellan, and Picton as one District cil, which was afterwards, in the course of the same year, under a al Act, subdivided into two by the formation of Campbelltown and n into a separate Council.

1844 the number of country District Councils had increased ght, and these, in conjunction with the Municipal Council of ey and the Road Trusts, subsequently established, constituted whole of the local government system prior to 1858. In this year irst important measure relating to general municipal government enacted. An Act was passed making provision for dissolving, if sary, the District Councils, and placing the areas controlled by under municipal bodies. Under its authority thirty-five districts incorporated, which, with the exception of Cook, joined to Cam- own in 1870, and East St. Leonards, subsequently united to eonards, still exist, although nearly one half have been reproclaimed e interim on account of additions or curtailments of area. The

The Metropolitan Transit Commissioners were appo
Public Vehicles Regulation Act of 1873, prior to whicl
of the street traffic was vested in the City Council. The
consisted of three members, but in 1886 the number
four by the appointment of a licensees' representati
during 1897, which were obtained from licenses (
were issued), fines, etc., amounted to £4,972, and th
£5,101.

Under the authority of the Fire Brigades Act of 188
Fire Brigade Board and thirty-two country Boards have
The cost of maintaining the Metropolitan Brigade is co
amounts by the Government, the municipalities withi
area, and the fire insurance companies holding risks wi
cipal districts. In 1897 the contributions consisted of
insurance offices interested, £6,700 from the Governn
from the city and suburban municipalities. The amou
31st December, 1897, was £60,426,170, showing an in
23 per cent. in ten years, the total at the close of 18
£49,209,395. Some of the country boards receive su
Government and the municipalities interested, but th
panies do not consider themselves bound by the Act to
expenditure in connection with country boards. In
Boards constituted under the Act, several municipaliti
local Fire Brigades; and in a following chapter, under
Insurance, will be found some particulars respecting th

The Metropolitan Board of Water Supply and Seweras
in 1887, and that of the Hunter District in 1892;
transactions will be found in subsequent pages.

Prior to 1889 the regulation of the port of Wollon
to the Marine Board of New South Wales. In the ye
was passed which transferred the control of the port to

ed in each case that the members of the Municipal Council for
ne being should be the trustees, and that they should, with the
sion of the Governor-in-Council, be authorised to borrow money
e purpose of tapping the neighbouring rivers, and of erecting
and constructing works for the irrigation of a portion of the
rary common, which should be divided into lots and leased to
le persons. The area brought under the Wentworth Trust
ed of 10,600 acres; and £1,000 was spent in preliminary
es during 1894. Under a special clause of the Act, however, the
as now been dissolved, and its powers assumed by the Govern-
who have constructed the necessary works. The land adminis-
y the Hay Trust, originally comprising 12,847 acres, was thrown
n December, 1893, and at the end of 1894, 62 holdings, embracing
a of 778 acres, had been applied for. The principal crops planted
arley, wheat, and oats. An amending Act was passed in 1896,
remodelled the Trust, the number of members being increased to
ree of whom are officers of the Public Service. The works were
ted by an engineer appointed by the Government, and the area
lly vested in the trustees was reduced to about 3,000 acres.
ceipts during the year 1897 amounted to £8,424 4s. 4d., of
£8,331 1s. 1d. represented advances from the Colonial Treasurer;
.0s. rents and grazing dues, £39 deposits on allotments, and
. 3d. sale of iron, &c. The expenditure was £8,451 14s. 2d., the
tems being—payment of liabilities of old trust, £4,477 17s. 3d.;
.excavations, channels, bridges, culverts, weirs, &c., £3,254 19s. 7d.;
house and cottage, £401 13s. 5d. The credit balance at the
f the year was £115 16s. 2d. At Balranald an area of 1,000
as been surveyed, and several blocks of from 5 to 40 acres taken
umping machinery has been erected, and works for the distribu-
f the water commenced. The trustees have petitioned for the
tion of the Trust, as at Wentworth.

MUNICIPALITIES, 1897–8.

er the provisions of the Municipalities Act of 1897, contiguous
s with an area of not more than 9 square miles, and a population
less than 1,000, may be incorporated as boroughs; and districts
more than 50 square miles, with a population of not less than
ay be formed into municipal districts. Since the passing of this
1867 the number of municipalities has steadily increased, the total
7 having been 76; in 1887, 122; and at the end of 1898, 184.
se, 77 were boroughs and 107 municipal districts, the City of
y being classed with the former, as are the remainder of the 35
palities established under the previous Act of 1858. In the
of the municipal year, 1897–8, no new incorporations were
d, but Narromine became a municipal district in April, 1898.

Notwithstanding the relatively small area incorporated, the
tion within the boundaries of these districts in February, 189
bered approximately 777,070, equal to an average density of 2
square mile, or nearly 156 times that of the rest of the colony.

In the City of Sydney there were, at the close of 1897, 23,1
and stores, the dwellings being occupied by an estimated popul
98,250; in the suburbs of Sydney there were 67,750 houses, i
328,700 persons dwelt; while in the country municipalities the
68,863 houses, occupied by 350,120 persons; thus making a tota
municipalities of 159,798 houses and stores, accommodating
mately 777,070 people. In the unincorporated portion of the colo
were about 110,000 houses, inhabited by approximately 546,390

The estimated value of land, houses, and other permanent i
ments in the colony may be approximately stated at £265.
of which £120,625,600 is the value of ratable property in th
porated districts. The value of unalienated Crown lands is not i
in this estimate.

Authority is given by the Act to maintain the thoroughfa
construct lighting, sewerage, and water supply works, and to l
necessary rates in connection therewith; to make and enforce
for the maintenance of the public health and the abatement of nu
to license vehicles plying for hire; and generally to take mea
the material and sanitary condition of the residents.

Since 1893 Councils have been empowered to purchase or le
wharves, jetties, piers, etc., erected within the district, and t
money for the purpose of constructing such landing places.

The Sydney Corporation Act directs that valuers shall be
from time to time to assess improved property within the ci
fair average annual value, with an allowance for outgoings
ing 10 per cent., and the unimproved property at a maximu
cent. on its capital value, and on the value of such assessm
rate not exceeding 2s. in the £ may be levied, exclusive of
Appeal Courts are held annually. The latest assessment was
1896, supplementary estimates being made for 1897 and 1
rate has stood at 16d. since 1891, and has again been left at th
for 1899. This rate is the only one at present in force. T
however, provides for a special local rate not exceeding 6d. i
of annual value, for any work which may be for the particular
of one locality, but then only if two-thirds of the ratepayers
locality petition for the same. Occasional advantage of this po
been taken for street-watering, though not of late years.

In boroughs and municipal districts two persons are ap
every year to make a valuation of all municipal property, a
councils are empowered to raise revenue by rates on the va
found, not exceeding 1s. in the £ for ordinary purposes, and th
amount for special purposes, with 6d. in addition for street wa
This provision has been in existence since 1867. The amo

rate is calculated upon nine-tenths of the fair average annual tal of all buildings and cultivated lands, or lands which are, or have n, let for pastoral, mining, or other purposes, whether such lands buildings are actually occupied or not; and upon 5 per cent. of the ital value of the fee-simple of all unimproved lands. In some cases ls are leased at merely nominal rentals, and attempts have been made mend the law so that in no case shall the annual value of ratable perty be computed at less than 5 per cent. of its capital value, but far without success. The maximum general rate is now, in the ority of cases, found inadequate, and special grants of 5s. to 20s. per of general rates collected have been voted by Parliament from time time, the two latest being one of 5s. on rates collected between the nths of August, 1895, and August, 1896, and another of 2s. 6d. on ections between August, 1896, and August, 1897. None of these cial grants applied to the City of Sydney. In addition to the special nts, a total sum of £94,870 was paid during the year 1897-8, principally ards the maintenance of main roads running through municipalities. During the municipal year 1897–8 the maximum rate of 1s. in the £ levied in all the suburban and country municipalities, with the eption of Carcoar, which imposed 10d., Darlington, Cooma, Cudal, l Junee, which imposed 9d., and Lithgow, which imposed 6d. In rlington the rate of 9d. included the cost of lighting the borough gas, and in a few country municipalities the cost of street lighting s also paid out of the general rate. There were 98 municipalities ere lighting rates were imposed, ranging from 1d. to 6d. in the for gas, 3d. to 6d. for electric light, and 1d. to 4d. for oil lamps. only 26 municipalities, exclusive of those supplied by the Metropolitan Water and Sewerage Board, was there a water rate, viz., 1s. the £, with five exceptions—one at 10d., two at 9d., and two at . Manly was the only municipality which has erected waterworks der the Metropolitan Water and Sewerage Act; while Balranald, y, and Wentworth were the only country municipalities which had en advantage of the Country Towns Water and Sewerage Act, where rate was not levied to defray the cost of the service, the supply ing optional, and the charge made by meter. Other special rates, stly for street-watering, were levied in some of the municipalities. ly two districts—Kempsey (¼d.) and Wollongong (1d.)—levied a rary rate—reading facilities being afforded without charge by the al council in many other towns, or, on payment, by the local hool of Arts or Mechanics' Institute; while a fire brigade rate of was levied in Goulburn. Although authorised by the Act of 1867 levy a rate for the purpose of providing the means of education young children, the municipal bodies have not found it necessary to e advantage of this provision, owing to the excellent system of public truction in force in the colony.

Municipalities which avail themselves of the provisions of the Country wns Water and Sewerage Act of 1880 are empowered to levy a rate

for each service not exceeding a maximum of 5 per cent. on the a
value of land and tenements, in addition to the ordinary municip
On the 30th June, 1898, there were, including Richmond, 24
palities with water-works constructed under the provisions of t
while works were in progress at Mudgee, Condobolin, Coota
(additional works), Junee, Mudgee, Parkes, and Tamworth.

The Noxious Trades and Cattle Slaughtering Act and the
Supervision Act are administered by the Board of Health; but
premises are supervised by the Municipal Councils, who receive t
In unincorporated districts the administration of the Acts is en
to the police.

In order to aid municipalities in providing for the expe
attending their inception, the Act provides for endowment
granted for a period of fifteen years. In each of the fi
years after incorporation, every municipality is entitled to a su
to the whole amount actually raised by rates or assessmen
during the past half year; in each of the next succeeding fiv
a sum equal to one moiety; and in each of the next succeed
years, a sum equal to one-fourth of the amount so received.
the expiry of these fifteen years the assistance which municipalit
demand from the Government ceases, and further aid from t
must be obtained by special grant. At the end of 1898 the
seventy-five municipalities entitled to statutory endowment.

The City Act of 1879 provided for an annual endowment
State of £25,000 for a period of ten years. It also enacted that
for auctioneers' licenses within the city should be paid over
Treasury to the City Council. The amount so received in 1
£2,137, in 1896, £3,438, and in 1897, £2,247. Although
authorised the raising of loans equal in amount to five years
after the discontinuance of the endowment in 1889, yet it
found convenient to obtain special Parliamentary sanction to e
loan. Particulars of all City loans will be found on page 892.

The 1867 Act gave the Council of any municipality auth
borrow on debentures, mortgage, or bond, hypothecating a
personal estate, or annual revenue, actual or prospective, belo
the municipality, provided that the amount borrowed did no
the estimated revenue for five years. In 1884 and 1888 A
passed empowering the Councils to contract special loans
erection of gasworks and town halls, and in 1893 another a
Act, empowering the Councils to raise money to repay loans,
law. These Acts have now been consolidated.

About one half of the municipalities are divided into wa
number of which is regulated by the population; and every
whether male or female, of the full age of twenty-one years, wh
7th day of January in any year, may be the occupier, lessee, o
of any ratable property within any municipality, and who m
paid rates on the same prior to day of election, is entitled to vote.

assessed at an annual value not exceeding £25, the ratepayer o one vote; if assessed at over £25 and not exceeding £75, es; if over £75 and not exceeding £150, to three votes; · £150, to four votes. Voting is by ballot, as in Parlia- ctions; and by special enactment, both owner and tenant are vote in the City of Sydney, the ratepayer being allowed the vote (if any), the other one vote only. It is impossible to present state of the returns of the suburban and country ies, how many persons in the aggregate have the right to here were 399 aldermen in suburban, and 1,215 in country ies, which would give one alderman to 824 residents in the to 288 in the latter. In December, 1897, the number of the eight wards of the City of Sydney was 22,428, being of 935 electors per alderman; five wards were contested, lled being 10,399. In the other municipalities, in February, vards were contested out of a total of 376. The municipal City of Sydney is from 1st January to 31st December, and s are held on the 1st December in each year. In all the cipalities the year begins on the first Tuesday in February, y the nominations are made, polls for contested seats being n a week; one-third of the aldermen retire annually, and s for the year are elected.

wing table shows the capital and annual values and the of boroughs and municipal districts for the year 1898-9:—

sion.	Capital Value of—		Total Amount of General Rate Levied.	Fair Average Annual Value of—	
	Improved Land with Buildings thereon.	All Ratable Property.		Improved Land with Buildings thereon.	All Ratable Property.
	£	£	£	£	£
y	40,966,800	43,159,900	129,479	2,036,150	2,145,800
....	37,681,800	43,767,700	127,974	2,515,300	2,819,600
etropolitan...	78,648,600	86,927,600	257,453	4,551,450	4,965,400
....	30,323,700	33,698,000	108,355	2,245,230	2,413,950
tal	108,972,300	120,625,600	365,808	6,796,680	7,379,350

ously mentioned, a nominal annual value is frequently set roved land in order to avoid full rating, and in such cases no mate can be made of the real value of the property. It en, therefore, that the figures, both in the preceding and the following table, suffer on this account. On the other hand, been found difficult to obtain valuations which show the total ex the decline in the values of real estate since 1893, for it is not ge considered that the reduction of the capital value is in ratio to the annual value as indicated by the lower rating. It will prob found that the figures based on the rating for 1899–1900 will further slight reduction :—

Municipal Year.	Metropolitan Area.		Country Municipalities.	T
	Sydney.	Suburbs.		
	£	£	£	
1888-9—Annual value......	2,131,026	2,501,904	1,895,591	6,
Capital value.........	42,529,525	35,536,209	27,738,434	105,
1889-90—Annual value ...	2,228,817	2,987,061	2,149,566	7,
Capital value.........	44,576,340	45,635,138	30,073,617	120,
1890-1—Annual value......	2,276,362	3,110,825	2,405,163	7.
Capital value.........	45,527,240	48,208,834	33,475,972	127,
1891-2—Annual value......	2,710,488	3,141,101	2,505,214	8,
Capital value.........	51,237,600	47,987,210	34,784,948	134,
1892-3—Annual value......	2,785,846	3,227,851	2,683,806	8,
Capital value.........	55,716,900	51,174,200	37,386,300	144.
1893-4—Annual value... ..	2,777,245	3,290,637	2,861,593	8,
Capital value.........	55,550,000	54,511,000	40,877,000	150,
1894-5—Annual value......	2,496,175	3,190,022	2,774,477	8.
Capital value.........	55,470,000	53,481,000	42,275,000	151,
1895-6—Annual value... ..	2,361,290	2,991,630	2,542,725	7.
Capital value.........	47,225,800	49,466,400	39,509,900	136,
1896-7—Annual value.. ...	2,237,040	2,904,950	2,461,745	7,
Capital value.........	44,740,700	46,686,400	36,072,600	127,
1897-8—Annual value.. ...	2,173,260	2,849,650	2,407,210	7,
Capital value.........	43,465,200	44,999,200	34,322,600	122,
1898-9—Annual value	2,145,800	2,819,600	2,413,950	7,
Capital value..... ...	43,159,900	43,767,700	33,698,000	120,

The increase shown in this table to have taken place betwee and 1894 is very considerable, the annual value having rise

528,521 to £8,460,674, and the capital value from £105,804,168 to 1,226,000. Part of this increase was due to an additional number listricts incorporated; but when allowance is made for these it will be found that the capital value increased by something like 43 per During the last four years there has been a fall of 20 per cent. he capital value, after taking into account the addition to the total he incorporation of new municipalities.

he details of the net increase during the ten years from 1888-9 to 3-9 are as under:—

Division.	Increased annual value during ten years.		Increased capital value during ten years.	
	Total.	Per cent.	Total.	Per cent.
	£		£	
of Sydney	14,774	0·69	630,375	1·48
rbs of Sydney	317,696	12·70	8,231,491	23·16
try Municipalities	518,359	27·35	5,959,566	21·48
Total	850,829	13·03	14,821,432	14·01

ie growth of the city and suburbs has been marvellous, and Sydney stands as the second city of the British Empire, as estimated by annual value of its ratable property, Melbourne ranking fourth. annual value of property in Sydney and suburbs, covering an area .,178 acres, was, in February, 1898, £4,965,400; while, during the ious year, the annual value of Greater Melbourne, with an area of 560 acres, was £4,168,200. The following are the annual values me of the principal cities of Great Britain at the latest available s:—

London (County)		£36,574,812
Glasgow		4,352,181
Manchester	3,019,152	3,907,845
Salford	888,693	
Liverpool		3,839,479
Edinburgh		2,555,756
Birmingham		2,297,543
Leeds		1,522,092
Bristol		1,461,419
Sheffield		1,268,893
Bradford		1,149,735
Newcastle-on-Tyne		1,129,743
Belfast		1,064,000
Nottingham		918,000
Hull		876,811

The estimated capital value of all ratable property in municip for 1898-9 is shown in the following table:—

Municipality.	Total Capital Value of Ratable Property.
	£
Metropolitan—	
Sydney	43,159,900
Suburbs—	
Alexandria	634,200
Annandale	766,400
Ashfield	2,027,100
Balmain	3,348,400
Botany	233,000
Botany, North	317,700
Burwood	1,349,400
Camperdown	606,100
Canterbury	688,700
Concord	478,700
Darlington	258,800
Drummoyne	371,800
Enfield	309,000
Erskineville	310,500
Five Dock	207,100
Glebe	1,811,200
Hunter's Hill	613,200
Hurstville	679,700
Kogarah	476,000
Lane Cove	401,800
Leichhardt	1,366,000
Manly	959,600
Marrickville	2,159,600
Marsfield	93,300
Mosman	848,200
Newtown	2,341,600
North Sydney	3,645,100
Paddington	2,053,200
Petersham	1,821,500
Randwick	1,690,900
Redfern	2,220,000
Rockdale	921,600
Ryde	521,600
St. Peter's	521,000
Strathfield	871,000
Vaucluse	162,800
Waterloo	679,700
Waverley	1,880,100
Willoughby	869,800
Woollahra	2,311,700
Total, Suburbs £	43,767,700
Total, Sydney	43,159,900
Total, Metropolitan £	86,927,600

Municipality.	Total Value able P
Country—	
Aberdeen	
Adamstown	1
Albury	
Armidale	
Auburn	
Ballina	
Balranald	
Bankstown	
Bathurst	
Bega	
Berry	
Bingara	
Blayney	
Bombala	
Bourke	
Bowral	
Braidwood	
Broken Hill	1.
Broughton Vale	
Burrowa	
Cabramatta and Canley Vale	
Camden	
Campbelltown	
Carcoar	
Carrington	
Casino	
Castlereagh	
Cobar	
Condobolin	
Cooma	
Coonamble	
Cootamundra	
Coraki	
Cowra	
Cudal	
Cudgegong	
Deniliquin	
Dubbo	
Dundas	
Dungog	
Ermington & Rydalmere	
Forbes	
Gerringong	
Glen Innes	
Gosford	
Goulburn	
Grafton	
Grafton, South	
Granville	

unicipality.	Total Capital Value of Ratable Property.	Municipality.	Total Capital Value of Ratable Property.
—*continued.*	£	Country—*continued.*	£
ll	109,100	Peak Hill	74,600
	81,500	Penrith	261,000
ig	168,100	Picton	87,500
gai	94,600	Plattsburg	190,300
dah	100,000	Port Macquarie	73,700
on	586,100	Prospect & Sherwood	366,000
	293,200	Queanbeyan	77,200
nd	33,500	Quirindi	162,400
n	122,000	Raymond Terrace	65,700
rra, Central	708,200	Richmond	145,800
rra, North	260,800	Rookwood	284,800
urn	31,200	Scone	66,800
ll	231,700	Shellharbour	240,800
roo	309,300	Shoalhaven, South	163,000
rie	124,100	Silverton	68,700
	177,200	Singleton	224,000
nba	196,300	Singleton, South	88,000
ey	145,400	Smithfield & Fairfield	151,300
	147,500	St. Mary's	180,000
on	181,100	Stockton	135,800
on, New	112,000	Tamworth	395,100
e	403,700	Taree	54,900
w	373,000	Temora	122,300
ool	410,800	Tenterfield	154,500
n	70,100	Tumut	108,500
nd, East	298,200	Ulladulla	302,500
nd, West	728,300	Ulmarra	158,700
ether	304,100	Uralla	62,100
ong	136,000	Wagga Wagga	438,800
	131,200	Walcha	110,400
g	100,500	Wallendbeen	111,400
	158,600	Wallsend	211,600
th	103,200	Waratah	385,600
a	124,200	Warren	139,500
ale	258,200	Wellington	143,300
e	274,500	Wentworth	51,200
a	65,900	Wickham	490,500
mburrah	110,500	Wilcannia	100,800
rundi	63,700	Windsor	171,800
llbrook	149,200	Wingham	34,100
ri	140,700	Wollongong	378,300
ri, West	41,700	Yass	203,800
dera	244,300	Young	219,900
nine	54,800		
stle	2,497,300	Total, Country £	33,698,000
	185,800	Total, Metropolitan	86,927,600
n	84,300		
e	400,900		
, East	183,400	Grand Total £	120,625,600
	277,500		
atta	1,291,200		

Mining property is subject to rating only in respect of the va
the surface area and of the buildings erected thereon ; and in th
of Broken Hill and other mining municipalities, this value is in
in the amounts set down in the above table.

The total revenue collected by all the municipalities of the
during the year 1897-8 amounted to £720,895, including the
endowments and grants of £94,870. The chief heads of revenu
as stated below. The grants for roads are shown separate
they are almost exclusively for the maintenance of Government
passing through the municipalities. In "other rates" are includ
sanitary charges—where these are collected by the municipali
although they are not levied at so much per £, but represent f
direct services :—

Division.	General rates.	Other rates.	Endowments and Grants.	Road Grants.	Other Revenue.
	£	£	£	£	£
Sydney—City	134,007	......	......	......	45,353
,, Suburbs	132,228	62,117	31,578	4,247	18,338
Country	106,989	73,429	43,526	15,519	53,564
Total	373,224	135,546	75,104	19,766	117,255

The general rates amounted to £373,224--1s. in the £ being the
rate of all municipalities except the City of Sydney, which levied
and the other exceptions mentioned on page 881. No speci
is levied in the City, and in order to make the comparison e
the cost of lighting and of street watering should be deducted fr
general rates. The amount spent for the former service durin
was £14,760, or equal to about 1¾d. in the £ ; and on street w
£4,355, equal to ¼d. in the £.

Other rates and charges—for lighting, water, and other servic
levied in many municipalities, and the receipts under this head am
in 1897-8 to £135,546. This sum does not include the proceeds
levied by the Metropolitan and Hunter District Water and Se
Boards, and the water supplies of Campbelltown, Liverpool, an
mond, which, though actually local rates, are not collected by the
palities affected by them. The amount received from the sources s
during 1897-8 was £296,216, making, with the sum already men
£431,762 as the total charge for these special services. The w
the City of Sydney and suburbs is supplied with water by the
politan Board, with the exception of Manly, where municipal
works have been erected.

The endowments and grants amounted to 13·16 per cent. of th
revenue, the sum being equivalent to 2s. 5¼d. per head of the tota
lation within incorporated areas, or to 17·52 per cent., or 2s. 9

. excluding the inhabitants of the City of Sydney. The proportion h each source of revenue bears to the whole varies considerably, as ollowing statement shows:—

Division.	General Rates.	Other Rates.	Endowments and Grants.	Other Revenue.
	per cent.	per cent.	per cent.	per cent.
ey—City	74·71	....	....	25·29
Suburbs	53·21	24·99	14·42	7·38
try	36·51	25·06	20·15	18·28
Total	51·77	18·80	13·16	16·27

will be seen from a previous table that the gross revenue of all muni- ties, not including the State endowment and grants, was £626,025; this be added the revenue of the Metropolitan and Hunter District r and Sewerage Boards, the total will reach £922,241. This may ken as the whole burthen of local taxation, and is equivalent to ; 23s. 9d. per head of the population residing within the limits of porated districts, and to 12·5 per cent., or 2s. 6d. in the £, of the annual value of all ratable property, as against an average of d. levied in England and Wales, namely, 5s. 8d. in the Metro- n, and 4s. 1d. in other districts. These amounts are there con- d low, and are, in fact, far from representing the total of the cipal expenses, as, in the case of the provincial municipalities, large are contributed from the profits on the gas, water, and other takings so largely in their hands. In New South Wales, however, ready shown, the Government contributes largely to the cost of taining the municipalities.

connection with the municipal accounts of the colony, it may here xplained that the returns furnished by the councils are not so ate as might be desired, and the amounts of revenue and expenditure must be taken as the nearest approximation that can be arrived at. possible that in some cases items of account, such as transfers and entries, which do not really affect the revenue or expenditure, are ded, while, on the other hand, items which ought to be included are ut. These errors are gradually being rectified, as the accounts are checked in the Statistical Office in a systematic fashion, as far as it sible at the present time to do so. In making comparisons with ous years, however, it will be well to bear this in mind.

e total expenditure during 1897-8 by the various municipalities, ling payments to sinking funds, amounted to £838,868, which was

£117,973 in excess of the revenue receipts. The municipal expen
may be grouped under the following heads:—

Head of Expenditure.		Amount.	Per
	£	£	
Salaries and office expenses	74,980		
Other expenditure on administration	24,000		
		98,980	1
General works, services, and improvements		380,288	4
Lighting		79,720	
Water		28,061	
Sanitary and other expenditure not defrayed out of general rate and endowments		70,970	
Interest on loans and overdrafts		139,143	1
Payments to sinking funds		15,147	
Additions to plant, furniture, &c.		2,560	
Miscellaneous		23,999	
Total expenditure £		838,868	10

Valuers' and auditors' fees, legal expenses, and some other items
form part of the cost of administration, are entered in the mun
accounts under "Miscellaneous," of which amount they are estima
make up one half. The totals of "Miscellaneous" have, therefore
adjusted in the above and in the next three tables, in order to
more correct statement of the proportion which each head bears
whole. The total expenditure on sanitary services does not appear
above table, as in many municipalities the fees are paid to the
tractor.

The expenditure of the City of Sydney in 1897 reached the
£283,662, viz.:—

Head of Expenditure.		Amount.	Pe
	£	£	
Salaries and office expenses, including Mayor, £1,083, and auditors, £100	11,975		
Other expenditure on administration	5,812		
		17,787	
General works, services, and improvements		166,927	
Lighting		14,760	
Interest on loans	65,150		
Interest on overdraft	377		
		65,527	
Sinking funds		12,850	
Miscellaneous		5,811	
Total expenditure £		283,662	1

xpenditure of the suburban boroughs and municipal districts
year 1897-8 was £247,884, which may be subdivided under the
g heads :—

Head of Expenditure.		Amount.	Per cent.
	£	£	
nd office expenses	22,340		
penditure on administration	8,660		
		31,000	12·51
works, services, and improvements		104,617	42·20
		35,305	14·24
anly)		1,387	0·56
and other expenditure not defrayed out of general and endowments		26,940	10·87
on loans and overdrafts		38,311	15·46
s to sinking funds		838	0·34
s to plant, furniture, &c.		827	0·33
eous		8,659	3·49
Total expenditure £		247,884	100·00

roportional cost of administering these municipalities was nearly
hat of the city ; but when the smallness of some of the districts
lered, the cost of administration cannot be deemed unreasonably

xpenditure of the country municipalities of the colony for the
s £307,322, which, divided under the same headings as those
r suburban municipalities, appears as follows :—

Head of Expenditure.		Amount.	Per cent.
	£	£	
nd office expenses	40,665		
penditure on administration	9,528		
		50,193	16·33
works, services, and improvements		108,744	35·39
		29,655	9·65
		26,674	8·68
and other expenditure not defrayed out of general and endowments		44,030	14·33
on loans and overdrafts		35,305	11·49
s to sinking funds		1,459	0·47
s to plant, furniture, &c.		1,733	0·56
eous		9,529	3·10
Total expenditure £		307,322	100·00

oportion to the total expenditure, the administrative expenses of
ntry municipalities amounted to 30 per cent. more than those of
urban boroughs. This may be accounted for by the fact that
jority of the country boroughs and municipal districts, though
area, have but scant population and little revenue, and the
ion of expenses required to defray salaries, etc., is naturally
rger than in the case of the smaller but more populous districts
ding the metropolis.

The total amount of loans raised during 1897–8 was £137,261 £60,602 was redeemed; these sums include additions to and redu of secured overdrafts. The sinking funds were increased by £2 so that it would appear that the amount unprovided for was increa £54,377 in the course of the year. Most of the new loans were renewals, opportunity naturally being taken of the general reducti the rates of interest to considerably reduce, when practicable, the a liability in respect of interest charges. The total amount of apart from the liability to the State under the Country Towns' and Sewerage Act, outstanding at the close of the year, was £2,72 and towards meeting this amount there was at the credit of the si funds a sum of £256,742, leaving £2,470,827 not provided for. total amount authorised to be borrowed by the municipalities was gr than the amount actually raised, for in some cases the full amoun not issued, and in others the secured overdraft was less than the am of securities lodged with the bank. Rates of interest ranged from 3 cent.—which was carried by £150,000—to 8 per cent., which, how was only payable on a secured bank overdraft of £89; and the amount as interest on loans and overdrafts during the year was £139,143. A to the amount of loans the unsecured bank overdrafts, £200,096, on w rates vary from 5 to 8½ per cent., a total of interest-bearing indebte of £2,927,665 is found, at an average rate of interest of 4·75 per ce viz., 4·53 per cent. on the loans of the City of Sydney; 5·11 per ce those of the suburban municipalities; and 5·43 per cent. on those country municipalities. The total debt per head of population livi municipalities amounts to £3 15s. 4d., or, if allowance be made for ing funds, £3 8s. 9d., while the yearly charge for interest is 3s. 7 head. These sums, viewed apart from the resources of the municipa are by no means formidable. The following are the outstanding the City of Sydney at the close of 1897:—

Where floated.	Fund.	Amount.	Rate	W
		£	per cent.	
Sydney	City	20,000	6	
,,	,,	10,000	6	
,,	,,	10,000	6	
London	,,	60,000	4	
Sydney	Cattle Sale-yards	35,000	6	
London	Streets Loan	200,000	5	
,,	,,	100,000	4	
Sydney	Town Hall Loan	40,000	6	
,,	,, ,,	35,000	6	
London	,, ,,	200,000	4	
,,	Moore-street Improvement	250,000	4	
,,	Public Markets	300,000	4	
Sydney	,,	150,000	3½	
Total	£	1,410,000	.....	

ıe total debentures, £110,000 are renewable at maturity on ıority of the several Acts, the particular loans being denoted in le by an asterisk. Sinking funds have been established in on with most of the issues, the aggregate amount of which, at of 1897, was £246,549. In addition to the amounts quoted he City of Sydney was empowered in 1896 to raise £250,000 purpose of providing electric lighting plant. The outstanding ıd secured overdrafts of the other municipalities range from) to £89.

subjoined statement indicates those municipalities which had ed liabilities amounting to £5,000 and over at the beginning of Unsecured overdrafts have not been taken into account :—

pality.	Amount.	Municipality.	Amount.	Municipality.	Amount.
an—	£	Metropolitan—*cont.*	£	Country—*cont.*	£
ydney ..	1,410,000	Strathfield	6,500	Lithgow	6,000
ria	17,000	Waterloo	17,000	Liverpool	12,000
ıle	11,875	Waverley	50,000	Maitland, East ..	6,000
....	15,300	Willoughby	12,200	Maitland, West...	21,000
....	63,000	Woollahra	8,800	Merewether	5,500
....	5,000	Others (under £5,000)	14,770	Molong..........	5,100
l........	25,000			Mudgee	5,000
		Total, Metropolitan	2,130,096		
lown	17,000			Narrandera......	7,858
ary	9,000			Newcastle	57,400
yne	5,000	Country—		Orange	23,437
ille	10,000	Armidale........	18,450	Parramatta......	56,000
		Bathurst	12,000		
k	7,500	Bega	8,000	Penrith	23,000
....	36,779			Prospect and Sherwood.	6,000
' Hill ...	8,937	Bourke..........	7,500		
le	6,000	Bowral	12,000	Tamworth	5,000
		Broken Hill	5,300		
dt	39,045	Cootamundra....	11,000	Wagga Wagga ..	19,285
....	16,000			Waratah	15,500
ville	30,000	Dubbo	15,000	Wickham........	17,100
....	6,200	Glen Innes	14,000	Windsor	6,500
		Goulburn........	10,000		
n........	36,000	Grafton	5,539	Wollongong	8,000
ydney ..	58,150			Yass	7,500
ton	68,400	Granville........	16,200	Young	13,116
am	18,500	Hamilton........	8,300	Others (under £5,000)	88,988
		Illawarra, Central	5,000		
k	30,000	Inverell	5,000		
....	88,400			Total, Country..	597,473
e........	16,740	Katoomba	5,000		
....	6,000	Lambton........	11,600		
r's	10,000	Lismore	12,000	Grand Total .. £	2,727,569

ıe total amount, £1,358,137 was raised in London; £1,351,574 ıey or locally; and £17,858 in Victoria. If allowance be made £1,110,000 raised in London by the City Council, it will be at the other municipal authorities have relied chiefly on the markets to subscribe to their loan issues.

Against its debt of £1,447,111, which includes £37,111, the am of the net overdraft at the end of 1897, the City of Sydney poss assets approximately amounting to £3,275,155, made up as follows:

	£
Value of made roads and streets, not including value of land..	1,306,400
Town Hall, including organ, furniture, etc.	699,638
Markets and land	815,645
Other buildings	119,173
Sale-yards	77,900
Plant, stores, and materials	5,643
Sinking funds	246,540
Outstanding rates	2,000
Cash in hand	25
Total	£3,275,155

The expenditure on the Queen Victoria Market Buildings is included in the above total. At that time the amount was £321,3 the total cost has not yet been made up. Taking the assets at £3,596, the indebtedness of the City of Sydney would amount to 40·24 per c of the total assets.

In addition to the current loans and overdrafts secured by mortg etc., to the amount of £1,317,569, shown in the table on page 893, suburban and country municipalities were, on the 31st January, 1 also indebted for unsecured bank overdrafts to the amount of £84, and on contracts, etc., to a further amount of £48,306, making a cur indebtedness of £1,450,173, or a little more than six times the am of the general rate levied in 1898-9. But an annual sum of £16,9 the aggregate was also payable by twenty municipalities for waterw of which a list will be found on page 896. The sum of £463,86 down below is the value of the works, on which this annual liabili payable.

The assets of the suburban and country municipalities on the January, 1898, were as follow:—

	£
Roads and streets, not including land	4,175,76[illegible]
Town Halls, other buildings, and land	448,681
Water-works (constructed by Government) £463,863	
Water works (constructed without Government aid)	15,850
Gas-works and electric-lighting plant	216,878
Sale-yards	21,043
Wharves	17,330
Sewerage	78,146
Plant, stores, furniture, and material	66,872
Sinking funds	10,193
Fixed deposits and current bank balances	55,848
Outstanding general and other rates, etc.	188,531
Government endowments and grants accrued	17,849
Sundry accounts due	8,911
Cash in hand	1,914
Total	£5,373,706

The large amount of outstanding rates, £188,531, is in great part de up of accumulations on unimproved properties, the owners of ch cannot be traced. In some cases the proportion is over 50 per t. ; in one instance, over 90 per cent.

The total indebtedness of the incorporated districts outside the bound- es of the city of Sydney would, apart from the annual liability for terworks, appear to be only 26·99 per cent. of the total assets. This sideration of municipalities as a whole, however, does not reveal fact that some are struggling under a load of debt which is well nigh upportable.

The amalgamation of the forty-one metropolitan municipalities is a stion which has lately attracted some attention, and various schemes ve been suggested, some for the unification of these municipalities under e central administration, leaving, perhaps, certain matters still to local thorities, the number of which would be reduced ; and others merely posing to unite two or three adjacent municipalities. It is not bable that any great reduction in the cost of administration would effected by such a unification, as the salaries at present paid are not a lavish scale ; but there is no doubt that increased efficiency would attained, and the expenditure on works and improvements reduced. terest-charges on loans would certainly be considerably lessened ; for, twithstanding the reduction in rates during the last few years, a further ving of £4,300 would result if the £750,784 owing by the suburban nicipalities carried the average rate paid by the city of Sydney ; d in view of the increased importance and more economical working a Greater Sydney, a further reduction in the rates of future loans, her renewals or for fresh enterprises, might reasonably be expected.

The Municipal Association of New South Wales was formed in 1883, watch over and protect the interests of the municipal bodies. In the t year there were 63 councils subscribing, while in 1898 the number s 124. The Mayor of Sydney is president of the Association *ex officio.* vice is given to, and legal opinions obtained for, the members on atable points arising under the municipal act, and a general meeting held annually in Sydney, usually in the month of September.

WATER SUPPLY FOR COUNTRY TOWNS.

The Country Towns' Water Supply and Sewerage Act of 1880 was sed with the object of assisting municipalities to construct general tems of water supply and sewerage. To the end of June, 1898, 30 nicipal councils, including Richmond, had availed themselves of the vileges offered as regards the former service ; none, however, had fited by its provisions with respect to sewerage. The amount required carrying out the works is advanced by the State. The municipality, wever, has the option of supervising and constructing the works, ling which the Government undertakes these duties. Under the ginal Act the sum advanced was to be repaid by instalments, with terest at the rate of 4 per cent. on the unpaid balances, each annual instalment to be equal to 6 per cent. of the total cost, and the payment to be made twelve months after the date of the transfer of works to the municipality. But as it was found that the municipal were unable to comply with these conditions, the Government, in 1 passed an amending Act which granted them more favourable te the rate of interest being reduced to 3½ per cent., and the yearly re ments fixed at a maximum of 100.

The following is a statement of the works completed and handed by the Government at the 30th June, 1898, with the amounts expen and the sums payable annually for the period of one hundred years, first repayments having become due within twelve months of va dates ranging from the 31st December, 1892, to the 30th June. 1 In the calculation of these repayments, the interest on the expendi has been added, and any payments by the councils, as well as remitted under the authority of the Act, have been deducted:—

Municipality.	Total Expenditure by the State.	Amount Payable Annually.	Municipality.	Total Expenditure by the State.	Am Paya Annu
	£	£		£	£
Manly	37,820	1,368	Jerilderie	6,465	[illegible]
Albury	45,186	1,483	Lismore	9,396	[illegible]
Armidale	36,816	1,462	Lithgow	12,068	[illegible]
Balranald	7,963	217	Moama	6,525	[illegible]
Bathurst	53,876	1,989	Moss Vale	16,349	[illegible]
Bourke	14,336	486	Nowra	11,532	[illegible]
Coonamble	6,346	244	Nyngan	10,731	[illegible]
Cootamundra	11,645	394	Orange	30,942	1,1
Deniliquin	18,168	668	Wagga Wagga	37,272	1,3
Dubbo	13,986	551	Wentworth	9,665	[illegible]
Forbes	8,013	288	Wilcannia	8,000	
Goulburn	55,184	1,989			
Hay	7,072	278	Total	475,2[illegible]	[illegible]

The Manly works are included in this table, as, although they constructed under the Metropolitan Water and Sewerage Act of the more favourable terms of the Country Towns Acts were grant this case. In the case of Coonamble, a sum of £53 11s. is pay annually for water supplied by a Government artesian bore.

At Forbes, Hay, and Wilcannia, the works were constructed by municipal authorities, and the expenditure shown in the table is n actual cost of the works, but the Government valuation. In add to those mentioned above, works have been constructed at Cond Junee, Parkes, and Tamworth. The following table shows the expend on these, and also on the Mudgee works and the Cootamundra additio

Municipality.	Expenditure to 30th June, 1898.	Municipality.	Expendi 30th J 189
	£		£
Condobolin	5,595	Parkes	32,0
*Cootamundra	7,724	Tamworth	44,0
Junee	43,014		
Mudgee	5,982	Total	139,5

* Additions to existing works.

ll these works have now been completed with the exception of e at Mudgee. Seven municipal councils have constructed works of their own resources, but the Mudgee council have now arranged the construction of new works by the Government. The estimated es of the works constructed by the municipalities on the 31st uary, 1898, were as follow :—

Municipality.	Estimated value.	Municipality.	Estimated value.
	£		£
Mudgee	1,500	Singleton	600
Narrandera	7,080	Windsor	6,500
Parramatta	40,000		
Penrith	9,000	Total .. £	65,830
Silverton..............	250		

he water supply works of Broken Hill and Silverton were con- cted by a private company under a special Act of Parliament passed 1888.

SEWERAGE WORKS.

s previously mentioned, no advantage has been taken of the Act viding for the carrying out of sewerage works in country towns. will be seen from the table given below, however, that sewerage tems are in existence in several places ; but with few exceptions operations are on a minor scale. The general system of sewerage ich is now being carried out in the metropolitan area will supersede isolated systems of some of the suburban districts, and some of the ers already constructed will eventually form part of the general eme. The Metropolitan Board has already taken over part of the erage constructed by the City of Sydney and the Municipalities of field, Balmain, Darlington, North Sydney, and Redfern. The cost ewerage not taken over was as follows:—

Municipality.	Length.		Cost of Construction.	Municipality.	Length.		Cost of Construction.
	ms.	chs.	£		ms.	chs.	£
Annandale............	3	7	2,334	Coonamble	0	8	80
Ashfield	1	10	6,094	Goulburn.............	....		1,420
Balmain..............	2	0	2,000	Hay	1	0	1,000
Burwood	0	56	2,400	Murrumburrah	0	6	115
Camperdown	....		5,161	Newcastle	....		18,026
Glebe	12	19	16,217	Richmond	0	18	1,000
Leichhardt	....		4,500	Singleton............	1	0	1,000
North Sydney	7	30	4,850	Stockton	....		182
Petersham......... ..	1	10	4,752	Wagga Wagga	0	33	534
Strathfield...........	....		616	Wentworth	0	20	165
Waterloo	....		4,000	Wickham....	0	60	700
Willoughby	....		100				
Casino................	0	35	900	Total ....£			78,146

GAS AND ELECTRIC LIGHTING WORKS.

The Municipalities Act authorises the construction of w public lighting, by gas or otherwise, and gives the power to private consumers with gas; but as regards electric lighting thi be done without the authority of a special Act. The followi ment shows the municipalities which have constructed gas-wo the value of the same in January, 1898:—

Municipality.	Value of Works.	Municipality.	Value of Works.
	£		£
Armidale	12,000	Maitland, East	10,00
Bathurst	21,716	Molong	4,3
Bega	8,000	Muswellbrook	4,50
Bowral	7,400	Orange	13,00
Cootamundra	7,414	Wagga Wagga	17,
Dubbo	10,000	Waratah	9,
Glen Innes	6,800	Yass	7,5
Lismore	7,000		
Lithgow	6,000		
Liverpool	7,000	Total £	16[illegible]

Similar information is given below of municipalities whi erected electric-lighting plant:—

Municipality.	Value of Plant.	Municipality.	Value of Plant.
	£		£
Redfern	19,000	Tamworth	[illegible]
Lambton	7,000	Young	[illegible]
Newcastle	10,000		
Penrith	9,000	Total £	[illegible]

As already mentioned, the City of Sydney has obtained p erect an electric-lighting plant, and to raise a loan of £25 this purpose. At the end of 1898, however, no decision i arrived at as to the best way of carrying out the city ligh electricity. The following municipalities are supplied with light by private companies:—Canterbury (part of streets), Broken Hill (houses only), and Moss Vale.

ROADS AND STREETS.

The length of streets and lanes within the boundaries of the Sydney, at the end of 1897, was 117½ miles. Practically all th ways were formed, kerbed, and either wood-blocked or metall area laid down of the former material was 81 acres, exclusive of square yards of wood-blocking laid by the Government at Circula The value to the city of these streets was estimated at £1,3 which sum included £155,000 for footpaths, viz.:—Asphalted, £ and flagged, £95,000. Throughout the suburbs the extent o and streets was about 1,415 miles, of which 748 miles were sted, or gravelled, 218 miles formed only, 95 miles cleared and ied, 117 cleared only, and 237 miles natural surface; and the oximate value of these roadways, with footpaths, culverts, bridges, similar works, may be set down at £2,277,100. In the other muni- ities there were 1,517 miles of metalled, ballasted, or gravelled s and streets, 1,099 formed only, 428 miles cleared and drained, 1 cleared only, and 1,591 miles natural surface; in all 5,846 miles, value of these improvements being estimated at £1,898,600, which, ever, can only be regarded as an approximate sum. Government s have, as far as could be ascertained, been excluded from these s; nor is the value of land occupied taken into account, but the r may be set down at £8,367,000.

METROPOLITAN WATER SUPPLY AND SEWERAGE.

ith the rapid aggregation of the population in the metropolitan came the necessity of establishing a system of water supply and erage equal to the needs of a great city. Prior to 1887 the control ie water supply of the city and suburbs was in the hands of the City oration, and the supply was totally inadequate to meet the demands ı it, while the sewerage system was highly objectionable and icient. Several of the suburban Councils had also constructed local ems, as already mentioned.

ı 1867 a Royal Commission was appointed to investigate and report n proposals for supplying water to the city and suburbs. Two years r, after various projects had been considered, the Commissioners nitted a report recommending the adoption of the "Upper Nepean eme." A second Royal Commission was appointed in 1875 to report a sewerage scheme for the metropolis. The report of this Commission presented in 1877, and forms the basis of the system now being ied out. As much controversy was evoked by the recommendations these Commissions, the Government obtained the services of an ineer from England, and, after much patient investigation, he roved of the systems proposed and recommended them for adoption, an Act was passed in 1880 to authorise the works being carried out. first contract in connection with the construction of water supply ks was undertaken in November, 1879, and that of sewerage in gust, 1880.

n March, 1888, the water supply works had so far advanced that the ernment passed an Act establishing a Board of Administration, er the title of the Metropolitan Board of Water Supply and Sewer- to regulate the water supply and sewerage services in the county of nberland, including those under the control of the City Council. The agement of the former service was transferred to the Board in May, 8, and of the latter in September, 1889. The total length of water ns taken over was 355 miles, while on the 30th June, 1898, this had eased to 1,004 miles, exclusive of trunk mains. There were 70¼ miles ewers in 1889, lengthened to 320¼ miles in 1898. The Board consists

the City Corporation for the construction of water and
and a system of water supply from the Lachlan, Bunne
Swamps was adopted. By this scheme the waters of th
these swamps were intercepted at a point near the shor
A pumping plant was erected here, and the water
street Reservoir, 141 feet above the level of the sea ;
was pumped into Paddington Reservoir, at an elevat
above sea-level ; and to Woollahra, 282 feet above sea
of these works was £1,719,565. This system has since
by what is known as the "Upper Nepean scheme" alr
which was designed and carried out by the late Mr.
M.I.C.E. The works were made available in 1888, and
ample to provide a constant supply for the wants o
population of Sydney and suburbs.

The sources of supply are the waters of the Nepea
Cordeaux Rivers, draining an area of 354 square mi
enjoying a copious and regular rainfall. The off-take
a height of 437 feet above the level of the sea, and
through a series of conduits—partly tunnel, partly ope
places wrought-iron aqueducts—to Prospect Reservoir
40 miles from the farthest source of supply. Here a
has been constructed, covering an area, when full, of
capable of holding about 11,000 million gallons, of wh
millions are available for supply by gravitation. The t
195 feet above sea-level. The dam is 7,300 feet long,
top, and is carried to a height of 84 feet at the centre :
2,591,950 cubic yards of earthwork, and its water fac
heavy bluestone pitching. The conduits above Prospec
a capacity of 150 million gallons per day, and for 10
reservoir the capacity of the canals and pipes equals
50 million gallons, while for the last 11 miles the pipes

'rom Prospect the water flows 5 miles by open canal to the Pipe
ıd Basin, thence 5 miles by 6-feet wrought-iron pipes to the Potts'
l Balance Reservoir, which has a capacity of 100 million gallons, and
ers 24½ acres. This reservoir was designed to tide over any inter-
tion in the supply from Prospect, as well as to prevent fluctuation
he head of pressure. The duplication of the 6-ft. pipe between the
in and Potts' Hill, at a cost of £70,205, was recommended, in July,
7, by the Public Works Committee, as also the raising of the sides of
canal between Prospect and the Basin, thus increasing its capacity to
-three and a half million gallons per day, at a cost of £39,112. At
ts' Hill the water passes through a series of copper-gauze screens, and
hen conducted by two mains into Sydney. At Lewisham a bifurca-
ı takes place in one of these mains; one branch supplying the Peter-
m Reservoir, the other continuing to Crown-street. The Petersham
ervoir is 166 feet above high-water mark, is built of brick, and has a
acity of 2,157,000 gallons. The new 48-in. main, laid in 1893, from
ts' Hill direct to Crown-street, is worked alternately with the old.
se two trunk mains are connected at Petersham as an intermediate
t. The Crown-street Reservoir is 21 miles from Prospect. It is of
k and contains 3½ million gallons, the top water-level being 141 feet
ve high-water mark. Owing to the topographical configuration of the
culated area, pumping for the purpose of supplying the upper zones
largely to be resorted to, and no less than 3,260¼ million gallons, or
rly 50 per cent. of the whole supply, were thus raised during the twelve
ıths ended June, 1898. At Crown-street is situated the main pump
station, where are erected three sets of compound high duty pumping
ines, viz., two Worthingtons, and one designed and erected by the
rt's Dock and Engineering Company. No. 1 Worthington is capable
aising 500,000 gallons per hour to the Paddington Reservoir, which
3 feet above Crown-street, and is of 2,000,000 gallons capacity. No. 2
rthington can raise 210,000 gallons per hour to the Woollahra
ervoir, 141 feet above Crown-street, and of 1,000,000 gallons capa
; or, if necessary, 200,000 gallons per hour to the Waverley Reser
, which is 219 feet above the level of the pumps, and has a capa
of 1,087,000 gallons: besides supplying two supplemental tanks
Waverley Park, 20 feet higher, and containing 10,000 gallons.
3 (Mort's) is capable of raising 100,000 gallons per hour to the
rerley tanks. A new covered reservoir, of a capacity of 17,936,000
ons, has been constructed in the Centennial Park, at a height of 215
for the purpose of ensuring a larger bulk of water within the city
ts; but this reservoir, although in use, had not been formally
led over to the Board at the end of 1898. This, it is believed,
e largest service tank in the Southern hemisphere. At [illegible]
is a 100,000 gallon wrought-iron tank at an elevation of 223
above sea-level. This tank is fed from the Woollahra Reser
by the Petersham trunk main, and supplies the higher part of
listrict.

North Sydney receives its supply from Potts' Hill, *viâ* Ryde, there is a reservoir containing 2,116,000 gallons, from which th is pumped into a million gallon tank at Ryde village, 234 feet abo level, and, by a continuation of the same main, into a pair of ta a joint capacity of 3,000,000 gallons, at Chatswood, at an elevat 370 feet above high-water mark. A small pumping plant ha erected at Chatswood, and fills two tanks of 1,000,000 and gallons' capacity at Wahroongah, 7¼ miles distant, at an elevat 720 feet above sea-level; and from Wahroongah the water flows as Hornsby, 13 miles to the north-west of Port Jackson.

The districts of Campbelltown and Liverpool are supplied fro main canal by gravitation. At the latter place, a 4,000,000-gallon e reservoir has been constructed, for the purpose of tiding ov interruption in the flow from the canal. Other districts lying Sydney, as Smithfield, Granville, Auburn, and Rookwood, are al plied *en route;* and at Smithfield there is a 100,000-gallon c tank, the top water of which is 175 feet above sea-level. At Pe there are two tanks 270 feet above sea-level, one of which has a c of 1,000,000 gallons, and the other of 22,800 gallons. These ta filled by a Worthington pumping plant at Carlton, which has a power of 30,000 gallons per hour. The farthest point south reached by the reticulation is Sandringham, distant 10 miles Redfern Railway Station; so that the Sydney water supply co range of 23 miles from north to south. The length of the exclusive of trunk mains and reticulations which have become o is 964 miles.

The total capacity of the service reservoirs is as under:—

South Sydney	128,552,800	gallons.
North Sydney	7,156,000	„
Total	135,708,800	„

The weekly chemical analysis made by the Government continues to show that the water is perfectly suitable for all p of a town water supply.

The number of houses connected with the metropolitan water on the 30th June, 1898, was 89,749, and the number of supplied, 434,800. The average daily consumption during th ended June, 1898, was 18,284,000 gallons, equivalent to 204 gall house, and to 42·05 gallons per head of population supplied. T amount supplied during the year was no less than 6,674 million exclusive of about 76½ million gallons supplied free of charge t hospitals, charitable institutions, and parks, while about 324 gallons were also supplied free for street-watering and, in cases no sewers were available, for gutter-flushing.

rate levied for water is 7d. in the £ in the Metropolitan district, he exception of the northernmost suburbs beyond Chatswood, the rate is 1s., while 1s. is the charge for 1,000 gallons by meter, s. 6d. beyond Chatswood. The revenue from the Water Service h during the year ended 30th June, 1898, was £178,881, and the liture £196,264, of which £30,460 was for maintenance, £14,760 nagement, £147,496 for interest on loans, and £3,548 depreciation it. These figures show an increase of £2,897 in the revenue as red with 1898.

er allowing for loans and advances from Government to the t of £3,870,161; the City Council Water Fund and Debentures, 582; rates overpaid, £112; and other liabilities, £87,279; and on her side, for the value of the water supply works, lands, and ngs, reservoirs, and pumping plant, £4,344,269; the amount r rates, etc., £30,766; for the value of stores, working plant, ols, £26,280; and for other assets, £9,545;—the balance-sheet 30th June, 1898, showed a sum of £4,074 at the debit of the ie account. The net revenue for the twelve months ended June, showed a return of 3·01 per cent. on the actual capital debt of 7,543. The rates of interest payable are 3·79 per cent. on the xpenditure by the State, and from 4 to 6 per cent. on municipal ures taken over. The Board, however, do not debit their account nterest on the City Council Water Fund, £377,382, on the ground his expenditure was made from rates contributed by the citizens, ey, therefore, show a return of 3·38 per cent. for the year 1897–8 l of 3·01 per cent. set down below. The rates for the other differ for the same reason. The Royal Commission which gated the affairs of the Board in 1897 recommended that the nment should definitely determine the amount of the capital n which interest should be set aside; but up to February, 1899, d not been carried into effect.

subjoined statement gives the transactions for each year during the Board was in operation:—

Capital Cost.		Rates struck.	Expenditure (including interest).	Houses supplied.	Estimated Population served.	Supply.	
Amount.	Return per cent.					Daily (average).	Total for period.
£		£	£	No.	No.	gallons.	gallons.
3,004,557	1·68	125,486	83,482	61,718	298,200	8,144,000	2,972,622,000
3,088,063	3·31	138,923	144,642	67,924	326,000	8,820,000	3,219,244,000
3,189,080	3·48	145,990	147,310	71,501	343,200	8,490,000	3,097,402,000
3,306,649	3·85	165,831	154,154	76,093	365,200	9,540,000	3,482,238,000
3,394,581	3·26	155,866	161,825	78,926	378,900	12,129,000	4,430,274,000
3,409,721	3·52	157,427	155,810	81,288	380,200	12,534,000	4,574,783,000
3,440,614	3·54	161,107	160,706	83,621	401,400	13,739,000	5,014,689,000
4,078,979	1·60	85,364	91,852	....	....	16,645,000	9,191,922,000
4,154,261	3·21	174,357	182,075	85,059	408,300		
4,244,560	3·11	175,984	188,221	87,190	418,500	17,659,000	6,445,675,000
4,327,543	3·01	178,881	196,264	89,749	434,800	18,284,000	6,673,511,000

* Six months ended 30th June.

The amounts of the capital debt, 1895–6, 1896–7, and 1897-8 include £32,525, the proportion of the cost of offices chargeable Water Supply Branch, as the Board charge instead working ex with rent on the new offices.

As already stated, the average daily supply of water to person metropolitan district during the year ended June, 1898, was 42·05 g as against 40·76 gallons during the eighteen months ended June, and 34·23 gallons in 1894.

THE HUNTER DISTRICT WATER SUPPLY.

The water supply works of the Lower Hunter were construct the Government, under the provisions of the Country Towns Supply and Sewerage Act of 1880. In 1892, under the aut of a special Act, a Board was established on similar lines to of the Metropolitan Water and Sewerage Board, the numb members also being the same—three being nominated by the Gov one elected by the Municipal Council of Newcastle, two by the ad municipalities, and one by the municipalities of East and West land and Morpeth. The following municipalities were proc within the area of the Board's jurisdiction:—Adamstown, Carr Hamilton, Lambton, Lambton (New), East Maitland, West Mai Merewether, Morpeth, Newcastle, Plattsburg, Wallsend, Warata Wickham, besides the unincorporated townships of Minmi and Creek.

The supply of water for the district is pumped from the River, about a mile and a half up stream from the Belmore West Maitland. The pumping engines are situated above the on a hill about 44 chains from the river. At the pumping there is a settling tank of 1,390,500 gallons; also four filter be feet by 100 feet each, a clear water tank of 589,500 gallons and a storage reservoir of 172,408,100 gallons available capacity filtered water is pumped from the clear water tank into two reservoirs, one at East Maitland and one at Buttai. The connected by a 10-inch cast-iron main about 1½ miles in with a capacity of 163,430 gallons, and supplies East Mait Maitland, Morpeth, and neighbouring places. Buttai reservoir by a 15 inch cast-iron main, 5¼ miles in length, and has a capa 1,051,010 gallons, the districts supplied being Newcastle, Carr Wickham, Hamilton, Waratah, Merewether, Adamstown, New ton, Lambton, Wallsend, Plattsburg, Minmi, and Cockle Cree six of these districts the reservoirs are supplied by gravitatio Minmi (62,000 gallons), Hamilton (403,000 gallons), Wallsend (4 gallons), Newcastle (523,000 gallons), Lambton (402,000 gallon Obelisk Hill, Newcastle (137,000 gallons). On the hill at Ne there is also a high level iron tank with a capacity of 20,000 ı is supplied by a small pumping engine placed on the roof of the astle reservoir.

e length of the mains when the Board was established was 105¼, which had been increased to 137¼ miles by the 30th June, 1898. figures are exclusive of the lengths of suction, rising, and gravitamains, which amounted to 33⅓ miles on the date last mentioned.

e operations of the Board are at present entirely confined to water y, no sewerage works having yet been begun. Particulars relating operations of the Board are given below. The maximum rate in the £ is levied throughout the district. The expenditure for -8 includes £2,334, the instalment of the sinking fund for the struction of renewable works:—

	Capital Cost.		Rates struck.	Expenditure (includ'g Interest).	Houses Supplied.	Estimated Population Served.	Supply.	
	Amount.	Return per cent.					Daily (average).	Total.
	£		£	£	No.	No.	gallons.	gallons.
3	404,407	3·52	22,651	22,551	3,421	17,100	451,000	164,617,000
4	405,871	2·96	21,406	23,591	3,848	19,200	419,000	152,850,000
5	412,732	2·75	20,367	23,467	4,660	23,300	518,000	189,084,000
6	415,784	2·88	20,779	23,362	6,246	31,200	607,000	222,062,000
7	428,025	3·16	22,518	23,984	6,931	34,700	731,000	266,980,000
8	519,414	2·72	25,646	29,699	7,475	37,400	781,000	285,067,000

the Act of 1892, and an amending Act passed in 1894, the capital was to be liquidated by annual instalments distributed over 100 , interest being reckoned at 3½ per cent. In November, 1897, ver, a further amending Act was passed, abrogating the repay- of expenditure on "permanent works," and leaving the number nual instalments in liquidation of the cost of "renewable works" fixed by the Government from year to year.

vidence given before a Royal Commission which sat in 1897 showed the Board estimated their deficiency on the working for five years 26,700, without any provision having been made for the sinking prescribed by the previous Acts. It was urged by the Board so much of the capital debt should be remitted as would bring the amount of interest to such a sum as would be covered by the ective revenue.

RICHMOND WATER SUPPLY.

e municipality of Richmond availed itself of the Country Towns' er Supply and Sewerage Act, and carried out a scheme of water ly. The local Municipal Council administered the service until , 1893, when it was temporarily transferred, pending the obtaining gal powers, to the Metropolitan Board. As only the premises ose persons who signed an agreement to take the water can be rated, the revenue from the service is greatly restricted. The accoun kept separate from those of the metropolitan supply. A small pu plant was erected on the left bank of the Hawkesbury, just belo confluence of the Grose and the Nepean, as well as a circular brick t having a capacity of 225,000 gallons, the top water being 206 feet ab sea level. The capital cost of the service, together with the rates st and the liability against such, are shown hereunder:—

Year.	Capital Cost.	Annual Liability against Revenue.			Rates struck.
		Instalment required to pay off cost of works and interest in 100 years.	Maintenance (including proportion of head-office expenses).	Total.	
	£	£	£	£	£
1893	12,340	446	315	761	400
1894	12,340	446	638	1,084	439
1895-6	12,480	674	707	1,381	884
1896-7	12,637	457	383	840	636
1897-8	12,658	458	417	875	677

The figures shown for 1893 are for the seven months from 1st J to 31st December only, while those for 1895–6 cover the eig months from 1st January, 1895, to 30th June, 1896.

METROPOLITAN SEWERAGE WORKS.

The original sewerage works at Sydney were begun in 1854, in 1889, the date of transfer to the Board, there were, as stated previous page, 70½ miles of old city sewers in existence. All t old sewers are being gradually renovated and repaired, the cost b provided from revenue. The annual cost for maintenance is cons ably lessened by these renovations. The works now being carried will, when completed, drain the whole of the city and suburbs, charging the sewage of the city and the eastern suburbs into the c between Bondi and South Head, that of the western and sout suburbs at a sewage farm on the shores of Botany Bay, and that of northern suburbs at another sewage farm on the shores of M Harbour. Owing to the neglect of the former lessee to undertak necessary works this farm is now worked by the Board. Durin twelve months ended June, 1898, the average daily flow of sewa to the farm was 2,675,000 gallons, and the total quantity of silt rem from the screening chambers and deposited on the farm, 2,005 yards. The two main outfalls have been completed, but the reticul works in the suburbs will yet take some considerable time to com before the whole area profits by the system. The subjoined statem gives the transactions for each year since the sewerage system has under the control of the Board. The capital debt for the last two is exclusive of £32,525, being a proportion of cost of the new of

, as the Board have debited their working expenses with rent ew offices:—

Capital Cost.		Rates struck.	Expenditure (including interest).	Houses connected.	Estimated Population served.	Length of Sewers.	Length of Storm-water drains.
ount.	Return per cent.						
£		£	£	No.	No.	miles.	miles.
1,045	4·65	81,800	67,026	22,765	109,300	122·03	3·15
7,287	3·86	81,302	71,906	26,884	129,000	148·02	4·38
6,948	3·77	87,927	79,543	31,402	150,700	172·94	6·62
1,462	3·93	93,661	85,363	36,062	173,100	182·34	9·10
5,120	3·72	93,134	89,237	39,965	191,800	201·95	9·82
1,611	3·12	43,110	46,605	......	......	......	...
2,256	2·86	85,486	98,748	44,462	213,400	230·20	14·42
8,120	2·82	87,652	101,993	47,593	228,400	255·76	18·41
6,306	2·80	89,688	106,382	51,425	257,100	320·25	20·59

* Six months ended June 30th.

the twelve months ended June, 1898, 2,563 tons of silt were rom the sewers, and the bulk of it deposited on Government n works. About 4,730 loads of deposit were also taken from water drains.

he 30th June, 1898, there had been constructed 249·98 miles vers, and 20·59 miles of storm-water drains, making, together ld city sewers, a total of 340·84 miles of sewers and drains, length 270 miles were ventilated, the aggregate length of ating shafts erected being 124,201 feet. The number of houses and of population served at that date was 51,425 and 257,100 ly.

erage rate for the city of Sydney and the eastern suburbs is 7d., rn and the western suburbs being rated at 1s. The revenue ard from sewerage during the year ended June, 1898, was chiefly from rates; and the expenditure £106,382, viz., £19,807 nance, £10,757 for management, £74,600 for interest on loan d debentures taken over from the Municipal Councils, and depreciation. No interest, however, is debited by the Board ccount on £103,431 paid for sewerage works out of Consoli- enue. If this were done, the return per cent. yielded during vould be 2·80, as shown in the above table, instead of 2·93 set the Board. A similar difference exists in the return for ears.

nds necessary for the maintenance and management of the pply and Sewerage services, as well as the sum required to est on the capital debt, are obtained by the previously- l rates levied on the properties situated in the districts by the systems. The assessments of the Municipal Councils lly accepted by the Boards as the values on which to strike ial rates. In cases of more than ordinary consumption of water,

that district, and on several occasions unsuccessful at
to legislate upon the subject. In the year 1882, ho
ment of the principle was included in the Licensing
which, with an amendment made in the following
force. These measures provide that in every municipa
vote shall be taken every three years, at the election
which the ratepayers are permitted to vote either "Yes
questions: (1) Whether any new publicans' licenses
during the coming three years in the municipality or
and (2) whether any removals of publicans' licenses
within the same period. Over eleven-twentieths of th
required to make the vote operative in the negative.
local option are not content with this partial adoption
they urge its extension to every electorate in the colon
the electoral roll to have the right to vote. They f
place it in the power of a majority of the electors
licensed public-houses shall be suffered to exist at
contend that women should have the right to vote upo
well as men, and that public-houses should be abolishe
sation to the occupants or owners. Although the lo
taken once in three years in every municipality t
taken is not the same in all. During the three y
and 1898, only 11,080 electors voted on the first.
the second question, in the country municipalities. In
was against, and in 58 cases in favour of, the grantin
and in 2 cases the voting was equal; while in 118
majority in favour of, and in 104 cases against, remov
the voting was equal. The total number of elector
municipal rolls in February, 1898, was 84,362, and
fact that a considerable number of these were for
disqualified from voting, the small number of votes

and 5,751 against. In the city of Sydney a vote was taken cember, 1897, when, out of 22,428 voters on the roll, only d on the question of new licenses, viz., 787 in favour of, and inst ; and 2,045 on the question of removals, viz., 903 in favour 142 against. It would therefore appear that very little interest the matter except by the extreme advocates of temperance e hand, and those interested in the drink traffic on the other, general public is apathetic on the subject.

PARKS AND RECREATION RESERVES.

lways been the policy of the State to provide the residents rated towns with parks and reserves for public recreation, City of Sydney contains within its boundaries an extent of ares, and public gardens larger than exist in most of the es of the world without regard even to area. They cover 703 acres, or 24 per cent. of the whole of the city proper. on to these reserves, the inhabitants of Sydney have the 0 acres, formerly reserved for the water supply of the city, nown as the Centennial Park. This magnificent recreation s been cleared and planted, and is laid out with walks and that it is becoming a favourite resort of the citizens. The municipalities are also well provided for, as they contain, the Centennial Park, about 2,388 acres of public parks and ledicated to, and in some cases purchased for, the people by nment, or about 2¾ per cent. of their aggregate area.

ition to these parks and reserves, there was dedicated to , in December, 1879, a large area of land, situated about 16 h of the metropolis, and accessible by railway. This estate, n as the National Park, with the additions subsequently made nd 1883, contains a total area of 36,320 acres, surrounding the e bay of Port Hacking, and extending in a southerly direction he mountainous district of Illawarra. It is covered with t virgin forests ; the scenery is charming, and its beauties ousands of visitors.

r large tract of land, designated Ku-ring-gai Chase, was in December, 1894, for public use. The area of the Chase acres, and comprises portions of the parishes of Broken Bay, ordon, and South Colah. This park lies not more than 10 h of Sydney, and is accessible by railway to within 5 miles, or *vià* the Hawkesbury River, several of whose creeks, notably eek, intersect its forests.

country districts, reserves, extending in some cases over acres, have been proclaimed as temporary commons, whilst le areas have been from time to time dedicated as permanent attached to inland townships, which are otherwise well provided parks and reserves within their boundaries.

PUBLIC FI

SYSTEM OF REVENUE AND E

ON the 18th November, 1895, an
1870 was assented to. By thi
appropriations from the Consolidated
close of the financial year to which th
July, 1895, the cash receipts within the
as the actual income, and the cash p
the actual outlay." This amounted
system of keeping the public accoun
termed the "cash basis," a system of a
of the adjoining colonies, and has been
economy and good government. Und
seded, the expenditure for the services
ture during that year could only be
of accounts. When a specific appropr
the expenditure incurred under such
against the year for which the vote w
when the payments were made ; and f
for any year could not be closed until
written off or exhausted. As a matt
ture exceeded the income, there were
between the incoming and outgoing
charging items, sometimes of large am
result that conflicting and irreconcilabl
confusion of the uninitiated and the

In order to show how unfavourab
Revenue realised compare with one a
has been compiled. The figures cov

period the revenue appropriated exceeded that realised in every :—

Year.	Appropriations for Services of each year, irrespective of the year in which the appropriation was made.	Gross Revenue.	Excess of Appropriations.
	£	£	£
1888	9,138,985	8,886,332	252,653
1889	9,493,776	9,066,941	426,835
1890	9,809,183	9,494,584	314,599
1891	10,758,952	10,036,185	722,767
1892	11,288,413	10,501,104	787,309
1893	10,513,158	9,706,734	806,424
1894	10,203,957	9,459,235	744,722
*1895	4,923,339	4,558,569	364,770
†1896	9,491,592	9,253,939	237,653
†1897	9,922,856	9,287,000	635,856
†1898	9,572,397	9,482,096	90,301

* Six months ended 30th June. † Twelve months ended 30th June.

king the figures as they stand, it will be seen that from the 1st ary, 1888, to the 30th June, 1898, there was appropriated for the c service the sum of £105,116,608, while the actual revenue ned was £99,732,719. Fortunately, the expenditure actually red was below that authorised by Parliament, so that the figures given merely show what might have happened had the authority of ament been fully availed of. The actual excess of expenditure, ver, as will be seen from the statement given below, was sufficiently us in itself. The figures are exclusive of advances repaid and :—

Year.	Gross Revenue.	Gross Expenditure charged against year.	Excess of Revenue over Expenditure.	Excess of Expenditure over Revenue.
	£	£	£	£
1888	8,886,332	8,625,563	260,769	....
1889	9,066,941	9,151,437	....	84,496
1890	9,494,584	‡9,569,683	....	75,099
1891	10,036,185	‡10,578,230	....	542,045
1892	10,501,104	‡10,868,021	....	366,917
1893	9,706,734	‡9,816,875	....	110,141
1894	9,459,235	‡9,694,889	....	235,654
*1895	4,558,569	‡4,862,184	....	303,615
†1896	9,253,939	‡8,925,651	328,288	....
†1897	9,287,000	‡9,439,820	....	152,820
†1898	9,482,096	‡9,397,783	84,313	....

* Six months ended 30th June. † Twelve months ended 30th June.
‡ Includes redemption of Treasury Bills in aid of Revenue.

king 1891 as an illustration of the old system, it may be mentioned the expenditure for the twelve months extended over six years, and amounted to £10,578,230, of which £9,633,045 only was incurred d the year, and £945,185 in the following years; and as further trating the anomalies of the old system, it may be mentioned tha revenue for the year was £10,036,185, or £542,045 less than total outgoings, and only £403,140 more than the expenditure wi and chargeable to the year, although a possible further expenditure £1,125,907 had been provided for. Such being the ordinary condi of accounts, it will without difficulty be conceded that under so lo system a succession of deficits was only to be expected.

One unacquainted with the peculiarities of State finance might f it hard to understand how it is possible for a large deficit to h accumulated, and an expenditure in excess of revenue to have been further indulged in. The explanation is simple. Through the op tion of various Acts of the Legislature, and the accumulations in t Post Office Savings Banks, the Treasury has at its disposal large su in trust, and by the use of this money the accumulated deficits h been temporarily met. When in 1889 the deficit was consolidated, a Parliament authorised the issue of Treasury Bills to pay it off, th bills were not issued to the public, but, by entries in the books of t Treasury, the necessary sum was drawn from the Trust Funds in h and invested in the bills. This was only a formal operation, as t money had already been loaned to the revenue, and the issue of t bills simply turned a floating debt into one for a fixed term.

The references to appropriations would be incomplete without t subjoined statement, which shows the total appropriations for t services of each year subdivided into three heads. The amounts gi in the first two columns taken together represent the Estimates-in-ch for each year:—

Year ending 31st December.	Amount appropriated during year.		Amount appropriated in subsequent years.	Total amount authorised to be expended from Consolidated Reve from January, 18 to June, 189
	Special appropriation (Fixed Statutory Liabilities).	Annual Votes.		
	£	£	£	£
1887	2,082,306	6,398,360	573,196	9,053,862
1888	2,090,326	6,416,595	632,064	9,138,985
1889	2,126,379	7,067,272	300,125	9,493,776
1890	2,481,145	6,742,928	585,110	9,809,183
1891	2,533,116	7,117,053	1,108,783	10,758,952
1892	2,756,958	8,045,007	486,448	11,288,413
1893	2,924,195	7,105,478	483,485	10,513,158
1894	3,028,297	6,750,537	425,123	10,203,957
*1895	1,472,412	3,405,451	45,476	4,923,339
†1896	2,759,564	6,705,697	26,331	9,491,592
†1897	2,663,223	7,259,663	....	9,922,886
†1898	2,936,937	6,635,460	....	9,572,397
†1899	2,955,176	6,844,773	....	9,799,949

* Six months ended 30th June. † Twelve months ended 30th June.

l be noticed that there is a large annual expenditure provided r Special Acts apart from the annual appropriations of Parlia- The special appropriations form a primary charge on each year's collections.

GENERAL BANKING ACCOUNT.

ubjoined table has been inserted in order to make clear the ient banking operations. It shows each of the main accounts hich the Government conducts its financial business, as the y accounts are operated on under one or other of the headings ted. The Audit Act defines that all the accounts coming under shall constitute the Public Account; however, for convenience ng, the Public Account includes only the Consolidated Revenue ie Trust Funds subject to the Audit Act, and special suspense . These accounts, with the General Loan Account, and the inds not subject to the Audit Act, form the "General Account." side of this account for banking purposes is operated on under neral Banking Account"; and, in establishing the daily balance, egate of the credits is set against that of the debits, and so long rmer exceeds the latter the whole banking account is in credit. present time, the Trust Funds, to which attention will be ntly directed, largely assist in keeping the account in credit. e of the main divisions of the General Account on the 30th 98, will be found below :—

Head of Account.	Credit Balances on 30th June, 1898.		
	Amount invested in Securities.	Credit Cash Balance.	Total.
	£	£	£
unt—			
ds (subject to Audit Act)	4,790,725	3,177,826	7,968,551
and Maintenance of Public School Build- &c., Account	119,272	35,296	154,568
ted Revenue Fund	....	122,211	122,211
uspense Accounts— Post Office New-street umption Account .. .. Dr. 468,975 ial Park Account .. .. Dr. 224,366 to General Loan Account.. Dr. 1,500,000	....	Dr. 2,193,341	Dr. 2,193,341
lance of "Public Account," on June, 1898 .. .. £	4,900,997	1,141,992	6,051,989
n Account	....	1,530,664	1,530,664
s (not subject to Audit Act)—			
h Wales 1924 Stock Redemption Fund ..	....	19,807	19,807
h Wales 1925 Stock Redemption Fund ..	....	22,225	22,225
h Wales 1927 Stock Redemption Fund ..	....	6,937	6,937
Notes Withdrawal Account	....	110	110
Treasurer's Special Trust Accounts	318,554	129,635	448,189
nce of "General Account" on June, 1898 .. .. £	5,228,551	2,851,370	8,079,921

The distribution of the cash balance on the 30th June, 1
forth in the following table, the London accounts being sho
30th April, 1898, the latest date available before the closi
Public Accounts for the financial year :—

	£
Sydney Balance—30th June, 1898—	
Public Account (Consolidated Revenue Fund and General Trust Funds)—	
Bank of New South Wales	....
Commercial Banking Company of Sydney (Limited)	365,721
City Bank of Sydney	15,719
" " Fixed Deposit	135,000
Cash in Treasury	48,440
Special Trust Funds—Bank of New South Wales	178,713
General Loan Account—Bank of New South Wales	1,530,664
Total Cash in Sydney £	....
London Balance—30th June, 1898—	
Public Account	
Bank of England—30th April, 1898	907,321
London and Westminster Bank—30th April, 1898	343,938
Remittances in transit, &c., to 30th June, 1898	336,921
Total £	....

Consolidated Revenue Fund.

To understand the public accounts of the colony necessitat
part of the enquirer much patient study and a general kno
the financial and political history of the last twenty-five years :
not always possible even for a well equipped and patient studen
more than a general idea of the state of the colony's finances
existence of the old system of account-keeping which came
in 1895. Now that the system of keeping accounts on a
is properly in operation, in estimating the financial position of
try, there have still to be considered the Old Deficiency Ac
New Account under the Audit Act Amendment Act, and the
Account, all forming part of the Consolidated Revenue A
well as the Loans Account and the various Trust Accounts n
part of the Consolidated Revenue Account. The Old
Account properly begins in 1885, but it was only in 1897,
last obligation under the old system of account keeping was
the position of this account for each year could be accurate
Until all obligations had been met, only an approximation
made, and this depended for its accuracy on the correctne
Treasurer's estimate of the liabilities outstanding for previ
In previous issues of this volume no account was taken of
standing liabilities, the accumulated surplus or deficiency
down as the sum of the Treasury bills outstanding and the
draft or credit as the case might be. Now, it has been possib

account outstanding liabilities for each year, and the figures in the ious editions of this work may be taken as the apparent accumu- l deficiency, while the present figures represent the actual accumu- l deficiency.

he confusion which has attended the presentation of the public unts of the colony will no longer exist now that operations on the Deficiency Accounts have been closed and the Treasury and the lit Office are in a position to make a separation between the Old ciency Account and the New Account under the Audit Act Amend- t Act. This distinction has been adopted in the following table. figures therein given agree with those of the Auditor-General, pt in regard to the amount of the cash credit. The table and the ements of the Audit Office make the total cash credit £126,262; but, reas, the sums to the credit of the New Account are shown below as ,274, and to the Old Account, £33,988; the amount stated by the lit Office in the one case is £167,274, and in the other a cash over- t of £41,012. This difference, which is merely one of distribution, counted for by the Auditor-General having placed the whole sum 150,000 Treasury Bills redeemed on 31st December, 1895, to the Deficiency Account instead of charging half of that sum to the r Account current and half to the Old Deficiency Account.

Cash Credit.	Debit.					Outstanding Liabilities as ascertained by subsequent payments, less advances recovered, approximate.	Actual Accumulated Surplus.	Actual Accumulated Deficiency.
	Treasury Bills Current.			Cash Overdraft.	Total Debit Balance.			
	1889–90 Issues.	1896 Issues.	Total.					
£	£	£	£	£	£	£	£	£
32,050	....	....	....	....	......	366,644	......	334,585
....	....	....	....	366,684	366,684	202,055	......	568,739
132,336	....	....	....	....	......	205,929	......	73,591
925,069	....	....	....	....	......	†464,852	1,389,921	......
825,606	....	....	....	....	......	†439,349	1,264,955	......
1,110,092	....	....	....	....	......	†29,228	1,140,220	......
1,945,807	....	....	....	....	......	488,624	1,457,183	......
2,351,074	....	....	....	....	......	1,181,807	1,169,267	......
1,922,784	....	....	....	....	......	387,750	1,535,034	......
1,341,619	....	....	....	....	......	162,835	1,178,784	......
1,440,227	....	....	....	....	......	221,161	1,219,066	......
2,927,434	....	....	....	....	......	679,224	2,248,210	......
3,888,753	....	....	....	....	......	985,905	2,902,848	......
2,511,016	....	....	....	....	......	861,091	1,649,925	......
1,229,338	....	....	....	....	......	718,493	510,845	......
2,901	....	....	....	....	......	1,470,701	....	1,467,800
....	....	....	....	1,286,581	1,286,581	1,198,485	....	2,485,066
....	....	....	....	2,159,295	2,159,295	446,057	....	2,605,352
....	....	....	....	1,581,645	1,581,645	808,785	......	2,390,430
201,021	1,907,100	....	1,907,100	....	1,907,100	768,444	......	2,474,523
737,328	2,352,884	....	2,352,884	....	2,352,884	793,830	......	2,409,386
176,084	2,202,884	....	2,202,884	....	2,202,884	768,258	......	2,795,108
107,826	2,052,884	....	2,052,884	....	2,052,884	1,055,945	......	3,001,003
....	1,902,884	....	1,902,884	372,297	2,275,181	676,700	......	2,951,881
....	1,752,884	....	1,752,884	447,603	2,200,487	925,497	......	3,125,984
*	1,752,884	....	1,752,884	149,340	1,902,224	781,117	......	2,683,341

* Half-year ended 30th June.

† Advances outstanding in excess of liabilities.

Year	Cash Credit.	Debit.					Outstanding Liabilities (as ascertained by subsequent payments), less advances recovered, approximate.	Actual Accumulated Surplus.
		Treasury Bills Current.			Cash Over-draft.	Total Debit Balance.		
		1889-90 Issues.	1896 Issues.	Total.				
			OLD DEFICIENCY ACCOUNT.					
	£	£	£	£	£	£	£	£
1896*	177,354	1,602,884	1,174,700	2,777,584	....	2,777,584	†3,240	......
1897*	33,684	1,452,884	1,024,700	2,477,584	....	2,477,584	†324	......
1898*	33,988	1,302,884	1,024,700	2,327,584	....	2,327,584	....	......
			NEW ACCOUNT UNDER AUDIT ACT AMENDMENT ACT OF 1896.					
1896*	390,535	....	....	....	....	......	....	390,53
1897*	84,831	....	....	....	....	......	....	84,83
1898*	92,274	....	....	....	....	......	....	92,27

* Year ended 30th June. † Advances outstanding in excess of liabilitie

It will be seen that there was a deficiency of £2,293,596 on Account and a cash credit of £92,274 to the New Account. Th make the actual deficiency £2,201,322 ; but it must be underst the New Account is kept distinct from the Old Account, and th is carried forward and used for current purposes. The actual d is, therefore, the larger sum, and this is being redeemed at th £150,000 a year, and if future Treasurers contrive to make e it will be fifteen years before the deficiency will disappear. Be sum needed for its redemption, the accumulated deficiency of l previous years involve interest payments to the extent of £ year, making the total burthen on present accounts £219, annum.

REVENUE AND EXPENDITURE.

Reliable information respecting the revenue and expenditur colony dates from 1815, in which year the public receipts amo £21,639, and the expenditure to £19,980. From 1815 to 1 latter year being memorable in the annals of the colony as that transportation ceased the advance in the revenue was very ra 1840 the public receipts amounted to £683,112 —a sum not agai until 1853, two years after the discovery of gold. From 1853 the revenue made great strides, and amounted to £1,52 the year last mentioned. In December, 1859, the separ and took place, and consequently a falling off in the revenue l in the following year, the amount collected being £1,308,925. s and net revenue proper for the years given in the table were r :—

Year.	Gross Revenue (exclusive of Advances).	Refunds, including charges on collections.	Net Revenue proper.			
			Total.	Per Inhabitant.		
	£	£	£	£	s.	d.
1860	1,308,925	28,209	1,280,716	3	14	9
1865	1,771,162	38,680	1,732,482	4	6	8
1870	2,102,697	52,978	2,049,719	4	3	8
1875	4,121,996	100,360	4,021,636	6	17	7
1880	4,904,230	97,841	4,806,389	6	11	11
1881	6,707,963	156,829	6,551,134	8	11	3
1882	7,410.737	192,151	7,218,586	9	0	10
1883	6,470,341	243,720	6,226,621	7	8	7
1884	7,117,592	280,813	6,836,779	7	14	10
1885	7,587,368	206,817	7,380,551	7	19	2
1886	7,593,050	218,235	7,374,815	7	12	2
1887	8,582,809	205,854	8,376,955	8	6	9
1888	8,886,332	172,148	8,714,184	8	8	2
1889	9,066,941	191,211	8,875,730	8	6	5
1890	9,494,584	188,893	9,305,691	8	8	11
1891	10,036,185	263,405	9,772,780	8	10	11
1892	10,501,104	327,537	10,173,567	8	12	3
1893	9,706,734	207,482	9,499,252	7	16	11
1894	9,459,235	158,492	9,300,743	7	10	4
*1895	4,558,569	80,054	4,478,515	3	11	7
†1896	9,253,939	179,161	9,074,778	7	2	0
†1897	9,287,000	179,792	9,107,208	7	0	4
†1898	9,482,096	177,843	9,304,253	7	0	7

* Six months ended 30th June. † Twelve months ended 30th June.

gures relating to revenue, both above and in subsequent tables, usive of "Advances repaid" ; and in dealing with expenditure ces made" have been excluded from consideration, as transactions ese heads do not affect the ordinary revenue and the expenditure m. The terms "net revenue" and "net expenditure," used e and in subsequent pages, are to be taken as meaning revenue enditure freed from the transactions just mentioned.

et expenditure for years corresponding with those in the revenue at is given in the subjoined table, it being assumed that the are on a cash basis—that is, that each year's business is comthin that year. The term used in the table, "Expenditure from of current year," must not be taken in a literal sense, as in only rs during the last decade has the revenue sufficed for the expendi- This will be seen by comparing the annual expenditure given

below with the revenue for the corresponding years show
preceding table :—

Year.	Net Expenditure, exclusive of Advances.			Per Inhabitant.	
	From Revenue of current year.	From accumulated surplus.	Total.	From Revenue of current year.	From Accumulated Surplus.
	£	£	£	£ s. d.	£ s. d.
1860	1,284,568	......	1,284,568	3 15 0	......
1865	1,696,127	......	1,696,127	4 4 10	......
1870	2,550,002	......	2,550,002	5 4 1	......
1875	3,240,964	......	3,240,964	5 10 11	......
1880	5,129,028	331,287	5,460,315	7 0 9	0 9 1
1881	5,218,226	407,523	5,625,749	6 16 5	0 10 8
1882	5,631,499	524,160	6,155,659	7 1 0	0 13 2
1883	6,818,303	732,065	7,550,368	8 2 8	0 17 6
1884	7,531,771	598,426	8,130,197	8 10 7	0 13 7
1885	8,113,510	241,610	8,355,120	8 15 0	0 5 3
1886	8,786,808	72,469	8,859,277	9 1 3	0 1 6
1887	8,976,102	13,815	8,989,917	8 18 8	0 0 4
1888	8,471,755	20,211	8,491,966	8 3 8	0 0 4
1889	8,995,751	5,693	9,001,444	8 8 9	0 0 1
1890	9,210,992	3,677	9,214,669	8 7 2	0 0 1
1891	10,065,606	......	10,065,606	8 16 0	......
1892	9,931,411	......	9,931,411	8 8 1	......
1893	9,931,658	......	9,931,658	8 4 1	......
1894	9,178,706	......	9,178,706	7 8 4	......
*1895	4,844,299	......	4,844,299	3 16 11	......
†1896	9,673,057	......	9,673,057	7 11 4	.....
†1897	9,440,625	......	9,440,625	7 5 6	......
†1898	9,219,940	......	9,219,940	6 19 4	......

* Six months ended 30th June. † Twelve months ended 30th Jun

From 1872 to 1877—years notorious for the wholesale ali the public estate—the yearly income was considerably in exe annual payments, with the result that a large surplus was cre excess payments of 1878 and 1879 reduced the amount some the surpluses of 1881 and 1882 considerably augmented After the year last mentioned, however, large withdrawals ally made, and the fund became practically exhausted at the en Since that date the existing deficit has been accumulating.

SOURCES OF REVENUE.

The Revenue is classified under four heads—Taxation, Land Receipts for Services Rendered (such as revenue from rail ways, water supply, sewerage, posts, telegraphs, and fees kinds); and General Miscellaneous Receipts. The net reve under each of these four heads, during 1880 and subsequen shown below. There have been some slight changes made, figures were published, in the items under receipts for services red, due to the inclusion of certain items which hitherto were d under Miscellaneous Receipts, but are now regarded as more rly coming under the head of Services :—

r.	Net Revenue from—							
	Taxation.		Land Revenue.		Receipts for Services rendered.		General Miscellaneous Receipts.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.	Total.	Per Inhabitant	Total.	Per Inhabitant.
	£	£ s. d.	£	£ s. d.	£	£ s. d.	£	£ s. d.
0	1,379,065	1 17 10	1,005,327	2 4 1	1,597,009	2 3 10	224,088	0 6 2
1	1,739,424	2 5 6	2,724,341	3 11 3	1,944,110	2 10 10	143,250	0 3 8
2	1,861,663	2 6 8	2,797,470	3 10 1	2,363,781	2 19 2	195,672	0 4 11
	1,851,737	2 4 2	1,493,577	1 15 8	2,668,949	3 3 8	212,458	0 5 1
4	2,100,713	2 7 7	1,570,021	1 15 9	2,930,701	3 6 4	220,344	0 5 2
5	2,206,429	2 7 7	1,769,616	1 18 2	3,149,998	3 7 11	254,508	0 5 6
	2,552,506	2 12 8	1,543,958	1 11 10	3,067,288	3 3 3	211,063	0 4 5
	2,583,486	2 11 5	2,312,972	2 6 0	3,220,737	3 4 1	259,760	0 5 3
	2,626,097	2 10 8	2,210,638	2 2 8	3,620,242	3 9 11	257,207	0 4 11
	2,635,002	2 9 5	2,050,425	1 18 5	3,883,448	3 12 10	306,855	0 5 9
	2,704,043	2 9 1	2,158,645	1 19 2	4,138,692	3 15 2	304,311	0 5 6
	2,875,028	2 10 3	2,117,003	1 17 0	4,563,433	3 19 10	217,316	0 3 10
	3,345,265	2 16 8	2,055,564	1 14 10	4,546,595	3 16 11	226,143	0 3 10
	2,777,846	2 5 11	2,115,185	1 14 11	4,379,417	3 12 4	226,804	0 3 9
	2,688,693	2 3 5	2,078,751	1 13 7	4,251,606	3 8 9	281,033	0 4 7
	1,288,781	1 0 7	1,037,683	0 16 6	1,907,028	1 11 11	155,023	0 2 7
	2,493,622	1 19 0	1,976,240	1 10 11	4,315,670	3 7 7	289,246	0 4 6
	2,306,512	1 16 11	1,898,834	1 9 3	4,562,541	3 10 4	249,321	0 3 10
	2,511,298	1 17 11	1,976,816	1 10 0	4,610,546	3 9 8	205,593	0 3 0

* Six months ended 30th June. † Twelve months ended 30th June.

TAXATION.

toms and Excise duties, License fees, Land and Income taxes, and duties represent the various forms of taxation in for ; and if these are grouped under the generally accepte t and direct taxes, it will be found that Customs and E icense fees comprise the indirect taxation, while th e taxes and the Stamp duties come under the latter hea will be found a statement showing the revenue derived from each of taxation during 1896–98. No Land tax was collected in 18

Head of Revenue.	*1896.	*1897.	*
Indirect Taxation—			
Customs :—	£	£	£
Import Duties :—			
Spirits, wine, ale, and beer	728,998	743,612	732,
Tobacco, cigars, cigarettes, and opium	262,834	273,955	295,
Sugar and molasses	174,707	126,869	128,
Grain and pulse	48,581	....	.....
Other specific duties	392,061	124,089	72,
Ad valorem duties	212,222	4	....
Miscellaneous collections	10,816	7,186	7,
Total, Customs	1,825,219	1,290,715	1,256.
Excise :—			
Ale, beer, and porter	125,475	130,777	139.
Duty on tobacco, cigars, and cigarettes	138,100	139,799	147,
Other	8,251	6,561	4,
Total, Excise	271,826	277,137	291,
Licenses :—			
To retail fermented and spirituous liquors	96,157	94,546	94.
Other	26,952	26,993	27,
Total, Licenses	123,109	121.539	122,
Direct Taxation—			
Income Tax	27,658	305,316	180.
Land Tax	....	141,022	371
Total, Land and Income Tax	27,658	446,338	551
Stamp Duties :—			
Impressed and adhesive stamps	112,240	121,278	119
Probate, administration, and settlement duty	136,060	143,428	16
Other	70,004	67,639	68
Total, Stamp Duties	318,304	332,345	348
Gross Revenue from Taxation	2,566,116	2,458,074	2,570
Refunds	72,494	61,562	59
Net Revenue from Taxation	2,493,622	2,396,512	2,511

* Twelve months ended 30th June.

The Customs tariff has undergone considerable change since 1 no less than five principal Acts and three important amendi dealing with the tariff have been passed during the interv Customs Duties Act of 1895, assented to on the 12th Decembe provided for the abolition of all import duties hitherto in force on the 1st January, 1896, or on a later date named there ticles excepted being spirits, wines, beer, tobacco, cigars, cigarettes, ium, the duties on which remained the same as before. The s Duties Act of 1898 (32 of 1898), however, modified the Act of providing for the retention of the then existing duties on certain s, imposing a duty of one penny per pound upon tea, and raising pence per pound the duty on certain kinds of dried and candied

The tariff in force will be found detailed on page 174, in the this volume dealing with Commerce. The following are the hanges since May, 1871 :—

en l.	Act.	To take effect from	Alterations made.
871	34 Vic. No. 21 (repealing all previous Acts).	9 Mar., 1871	Specific duties largely increased. *Ad Valorem* duties of 5 per cent. imposed.
873	37 Vic. No. 5 (repealing parts of 1871 Act).	1 Jan., 1874	The number of articles subject to duty reduced. Duty imposed on Sarsaparilla containing more than 25 per cent. of proof spirit. *Ad Valorem* duties of 5 per cent. abolished.
880	43 Vic. No. 16 (amending Act).	10 Dec., 1879	Duties on Spirits, Spirituous Compounds, and Wines increased.
884	47 Vic. No. 10 (amending Act).	20 Feb., 1884	Duties imposed on Stearine and Cigarettes. Duties on Cigars, Tobacco, and Opium increased. The limit of under-proof allowance of spirits fixed at 16·5. The reputed contents of cases containing Spirits, Beer, and Wine regulated.
886	50 Vic. No. 16 (repealing the 1871, 1873, 1880, and 1884 Acts, or the unrepealed portions of them).	7 April, 1886	The number of articles charged specific duties largely increased. *Ad Valorem* duties of 5 per cent. reimposed. Duty on Perfumed Spirits increased.
887	51 Vic. No. 8 (repealing 1886 Act).	1 Oct., 1887	The number of articles charged specific duties considerably reduced. *Ad Valorem* duties of 5 per cent. abolished.
		1 May, 1887	Duties on Malt and Hops abolished.
		30 Mar., 1887	Duties on Spirits and Spirituous Compounds increased.
		30 Mar., 1887	New schedule of specific duties at lower rates.
892	55 Vic. No. 16 (repealing 1887 Act).	2 Dec., 1891	The number of articles subject to specific duties increased. *Ad Valorem* duties of 10 and 15 per cent. imposed.
		1 Jan., 1893	10s. per ton duty imposed on Pig-iron.
		1 Mar., 1892	Duty on Tea abolished.
895	59 Vic. No. 18 (repealing 1892 Act).	1 Jan., 1896	Abolishes all duties previously levied, except those on Narcotics and Stimulants. Certain duties, viz., those on Sugar, Candles, Oils, Biscuits, Confectionery, Fruit, Jams and Jellies and Preserves, are gradually reduced over a period ranging from 1½ to 4½ years before being finally removed.
898	Act 32 of 1898	3 Nov., 1898	Duties imposed by 59 Vic. No. 18, on Sugar, Glucose, Molasses and Treacle, Biscuits, Confectionery, Fruits, Jams, Jellies, and Preserves, cease to be diminishing duties, and are retained, and a duty of one penny per pound placed on Tea, and two-pence per pound on Fruits dried, candied, or prunes, exclusive of dates.

Prior to 1884 the only excise duty in force was on locally-di spirits. In the year named, however, tobacco, cigars, and cig manufactured in the colony were added to the list; and in 18 excise tax on beer was imposed, while the duty on distilled spirit increased from 12s. to 14s. per proof gallon. Further particulars r ing customs and excise duties will be found in the chapter dealing Commerce.

The changes in the customs and excise tariffs during the ten and a half years can be traced in the figures given i subjoined table, which represent the net collections under head. It will be noticed that the largest revenue from cu and excise duties was collected during 1892. Comparison o amount collected in different years has no value, as during th years the tariff has been altered three times, twice in the most r manner :—

Year.	Net Revenue from—			Per Inhabitant.		
	Customs.	Excise.	Total.	Customs.	Excise.	T
	£	£	£	£ s. d.	£ s. d.	£
1888	1,834,860	258,415	2,093,275	1 15 5	0 5 0	2
1889	1,868,652	260,136	2,128,788	1 15 1	0 4 11	2
1890	1,857,843	264,447	2,122,290	1 13 9	0 4 10	1
1891	2,132,414	287,026	2,419,440	1 17 4	0 5 1	2
1892	2,593,839	288,094	2,881,933	2 3 10	0 4 11	2
1893	2,076,817	264,167	2,340,984	1 14 3	0 4 5	1
1894	2,015,695	256,664	2,272,359	1 12 6	0 4 2	1
*1895	933,755	128,248	1,062,003	0 14 10	0 2 1	0
†1896	1,754,606	270,556	2,025,162	1 7 6	0 4 3	1
†1897	1,256,735	276,287	1,533,022	0 19 4	0 4 3	1
†1898	1,247,793	289,479	1,537,272	0 18 10	0 4 4	1

* Six months ended 30th June. † Twelve months ended 30th June.

he revenue from licenses exhibits little variation from year to year. amount received during the year ended 30th June, 1898, distributed er the principal heads, was as follows:—

Licenses.	Amount.	Licenses.	Amount.
	£		£
lesale spirit dealers and ewers	6,792	Auctioneers	4,250
etail fermented and spirit-ous liquors	94,788	Hawkers and pedlars	2,866
etail Colonial wine, cider, d perry	1,828	Pawnbrokers	590
illers and rectifiers	102	Gunpowder Act	903
ard and bagatelle	6,852	Sale of tobacco and cigars	2,710
		Other	834
		Total	£122,515

he table does not include the revenue from licenses issued to fisher- n, fishing-boats, bonded warehouses, and by the Mines Department

n 1886 the Stamp Duties Act of 1880 was amended, the alterations ng the abolition of the 1 per cent. general rate, and the adoption of raduated scale of duties on the estates of deceased persons, classified follows:—Where the value of the estate is under £5,000, 1 per cent.; ,000 and under £12,500, 2 per cent.: £12,500 and under £25,000, er cent.: £25,000 and under £50,000, 4 per cent.: over £50,000, 5 cent. During 1893 an amendment was inserted providing for the lusion from duty of estates valued at £200 gross and under that sum. e Bank Notes Act of 1893 provided for the increase of the annual nposition duty on bank notes from 2 to 2½ per cent. on all notes ued within the colony. As the Act mentioned lapsed in November, 95, the composition charged since that date has been at the old rate.

As already mentioned, the bulk of the Customs duties hitherto in ce were abolished as from the 1st January, 1896, duties on stimulants d narcotics being alone permanently retained, while the duties on gar, candles, oils, biscuits, confectionery, fruits, jams and jellies, and eserves were to be gradually reduced over a period ranging up to 4½ ars before being finally removed. To meet the revenue thus given , taxes on land and incomes were sanctioned by Parliament. The d tax is at the rate of 1d. in the £ on the unimproved value, with exemption of £240 on all estates, and a special exemption in favour municipal corporations and religious, educational, and other institu- ns of a like character. Where land is mortgaged the owner is also lowed to deduct from the tax a sum equal to 6d. in the £ on the terest paid on the mortgage. The income tax is levied on all incomes rned in the colony but not directly derived from the ownership, use, occupancy of land, whether improved or not, and is at the rate of d. in the £ on all incomes, subject to a general exemption of £200. e total amount of income tax collected during the year ending 30th ne, 1898, was £180,103. The first collections under the land tax ere made in October, 1896, and for the year ended 30th June, 1898, sum of £371,870 was collected.

The subjoined table gives the gross and net amounts of t collected during the period from 1880 to 1898, and the alterations to in the various duties may be traced in the return presented:-

Year.	Indirect.			Direct.			Gross Revenue from Taxation.	Refunds
	Customs.	Excise.	Licenses.	Stamps.	Income Tax.	Land Tax		
	£	£	£	£	£	£	£	£
1880	1,225,440	7,354	112,197	72,303	....	....	1,417,294	38,229
1881	1,458,676	8,705	115,964	192,503	....	....	1,770,848	31,424
1882	1,552,706	5,637	116,932	228,138	....	....	1,903,413	41,759
1883	1,546,857	12,193	117,683	214,975	....	....	1,891,708	39,971
1884	1,726,811	79,967	120,028	226,049	....	....	2,152,855	52,142
1885	1,759,955	116,497	122,095	253,504	....	....	2,252,051	46,222
1886	2,068,571	109,920	125,438	307,993	....	....	2,611,922	59,316
1887	2,011,947	204,420	126,432	321,749	....	....	2,664,548	61,082
1888	1,883,058	259,576	129,591	409,658	....	....	2,681,883	55,766
1889	1,905,883	261,371	130,396	379,519	....	....	2,677,169	42,167
1890	1,888,321	265,887	133,156	460,975	....	....	2,748,339	44,296
1891	2,168,265	288,198	133,103	326,778	....	....	2,916,344	41,316
1892	2,677,890	289,603	132,500	349,794	....	....	3,449,787	104,522
1893	2,127,645	265,554	129,644	311,723	....	....	2,834,566	56,720
1894	2,065,839	258,122	124,077	297,002	....	..	2,745,700	57,007
*1895	963,189	129,153	82,362	147,581	....	....	1,322,285	33,504
†1896	1,826,219	271,826	123,109	318,804	27,658	....	2,568,116	72,494
†1897	1,280,715	277,137	121,539	332,345	305,316	141,022	2,458,074	61,562
†1898	1,256,591	291,343	122,515	348,560	180,103	371,870	2,570,982	30,084

* Six months ended 30th June. † Twelve months ended 30th June.

LAND REVENUE.

In New South Wales, as well as in the other colonies of th the whole of the receipts from the sale and occupation of Crow are treated as public income. The proceeds from occupati rent, can with consistency be regarded as an item of revenue treatment of the proceeds of auction, conditional purchase, a classes of sales as ordinary revenue is open to grave objection.

The revenue derived from lands may be grouped under th heads—(a) auction sales and other forms of unconditional conditional sales or lands disposed of under the system of defe ments; (c) rents from pastoral, mining, and other classes of oc The first two sources have been amalgamated under the head tion; while the last is classed as occupation.

More than half the annual receipts from land are obtai alienation, as will be seen from the following table, which detail the revenue from 1896 to 1898, but as over 40 per ce amounts shown as instalments and interest represents in f conditional purchases outstanding; to that extent the m sales may be legitimately viewed as income :—

Head of Revenue.	*1896.	*1897.	*1898.
:—	£	£	£
sales..................................	60,349	60,710	89,399
.. ..	7,547	7,889	9,993
Total.	67,896	68,599	99,392
l Purchases :—			
and improvements	28,199	28,232	37,772
nts and interest..................	893,549	885,355	904,769
(under Act of 1861)	80,755	75,800	75,773
s.......................................	63,838	62,976	88,180
l Selections	3,386	8,012	15,592
Total............................	1,069,727	1,060,375	1,122,086
Total, Alienation	1,137,623	1,128,974	1,221,478
—			
leases	344,634	320,535	247,208
nal leases..........................	155,501	153,513	164,148
ion licenses	126,216	122,978	106,439
ad leases..........................	77,100	61,024	56,328
and other leases	53,277	61,341	79,530
ts	611	468	129
Total............................	757,339	719,859	653,782
leases	11,093	11,421	13,613
f auriferous lands	15,069	15,174	14,468
rights	10,857	5,791	4,305
on minerals.......................	9,221	10,800	10,450
....	2,910	2,133	4,294
Total............................	49,150	45,319	47,130
Total, Occupation......	806,489	765,178	700,912
s Land Receipts.			
fees	23,411	22,809	27,974
pecial objects	16,780	17,413	18,855
licenses, royalty etc............	6,631	8,216	9,740
....	26,802	10,839	52,642
Total	73,624	59,277	109,211
venue from Lands..............	2,017,736	1,953,429	2,031,601
....	41,496	54,595	54,785
venue from Lands	1,976,240	1,898,834	1,976,816

* Twelve months ending 30th June.

nal income from public lands has varied considerably since ct became law. In 1864 the minimum revenue was reached, mount received being only £297,866, equivalent to 15s. 6d. ant while in 1877, the year of maximum revenue, the gross nounted to £3,236,277, or £5 2s. 11d. per inhabitant. e passing of the 1884 Act the whole area of Crown lands le for free selection, including the areas held under pastoral e Act mentioned, however, improved the condition of the pastoralist by granting him fixity of tenure of one half of his r a term of years, the leasehold half being exempt from cond purchase during his tenure; but the leases were appraised at a rent, which considerably increased the revenue from this source following years. In 1890 an Act was passed under which the r Crown leases, as appraised in 1884, were determined anew; and in c which the new appraisement was less than the previous one, the G ment refunded the amount which had been overpaid, with inter 5 per cent. The first refunds under the Act were made during in which year the amount, including interest, was £128,259, wh corresponding amount for 1893 was £392, and for 1894—the la in which a refund was made—only £32.

Prior to the passing of the 1884 Act the only forms of lease g were pastoral, annual, special, and pre-emptive. Under the Ac tioned, provision was made for the continuance of each of these fo lease except the pre-emptive, which was abolished; and occu licenses, and conditional and homestead leases, were established supplementary Act of 1889 provided for five additional forms of which were as follow:—Scrub, snowland, artesian well, residenti inferior land. Under the Land Act of 1895 three new form been provided for.

The gross revenue derived from alienation and occupation, a gross and net land revenue, from 1880 to 1898, were as follow:-

Year.	Alienation.		Occupation.		Gross Revenue from Lands.	Refunds.	E fr
	Sales, etc.	Conditional Purchases. ‡	Pastoral. §	Mining, etc.			
	£	£	£	£	£	£	
1880	731,353	650,674	237,660	26,749	1,646,436	41,109	1.
1881	1,415,460	1,067,879	309,170	28,480	2,820,989	96,648	2
1882	1,306,300	1,148,741	430,417	28,936	2,914,394	116,924	2
1883	338,234	931,235	358,957	27,643	1,656,069	162,492	1
1884	411,202	952,281	344,096	45,765	1,753,344	174,323	1
1885	535,508	778,849	517,156	44,939	1,876,452	106,836	1.
1886	375,458	830,965	391,749	45,846	1,644,018	100,060	1.
1887	349,585	872,192	1,100,423	56,795	2,378,995	66,023	2.
1888	316,034	896,249	941,521	114,449	2,268,253	57,615	2.
1889	214,691	934,480	917,491	70,901	2,137,563	87,138	2
1890	225,387	1,153,377	785,116	79,159	2,243,039	84,394	2
1891	191,696	1,154,979	848,960	71,001	2,266,636	149,633	2.
1892	224,164	1,015,175	915,378	59,345	2,214,062	158,498	2.
1893	252,782	1,044,710	849,652	59,123	2,206,267	91,082	2.
1894	234,408	1,052,198	789,278	49,291	2,125,175	46,424	2.
*1895	36,378	852,823	139,219	24,932	1,053,352	15,669	1,
†1896	67,896	1,093,138	800,921	55,781	2,017,736	41,496	1,
†1897	68,599	1,082,516	748,779	53,535	1,953,429	54,595	1,
†1898	99,392	1,150,060	725,279	56,870	2,031,601	54,785	1,

* Six months ended 30th June. † Twelve months ended 30th June. ‡ Includes Sur
§ Includes all Miscellaneous Receipts except Survey Fees and Timber Licenses. I
Timber Licenses.

e land policy of the colony, though largely connected with its ces, will be more properly discussed in the part of this work deal- with land settlement. It may here be sufficient to say that the revenue obtained from the sale of Crown lands during the years eding 1883 was not due to the demand created by the normal pro- of settlement, but was the outcome of an unhealthy rivalry between wo principal classes of settlers—the pastoral tenants and the free tors. The estate of the country was being parted with without conditions as to improvements or settlement; and as the great t of land sales was not so much to obtain revenue as to promote ement, it was decided to sell by auction only a limited area (200,000) during any one year. To this determination is to be attributed alling off in the revenue under the head of sales for 1883 and all equent years.

RECEIPTS FOR SERVICES RENDERED.

eceipts from the railways and tramways, water supply and sewer- and post and telegraphs constitute the bulk of the revenue from ces, the balance under this head being made up chiefly of dues and of various kinds.

e total revenue has considerably increased of late years, and so has the expenditure, the figures shown being not wholly an index rogress. The only services which can be considered as self-sup- ing—that is to say, yielding sufficient revenue to cover working nses and interest on capital debt—are the railways, tramways, the opolitan water supply and sewerage, and the Hunter district water ly, the first mentioned showing a surplus for the year 1896-7 after nterval of fifteen years. The gross receipts received under the head ach service during the period 1896 to 1898, were as follow:—

Service.	*1896. £	*1897. £	*1898. £
ays	2,866,012	3,060,681	3,053,406
ways	290,515	306,871	315,515
and Telegraphs—			
stage	476,399	488,974	507,439
ctric Telegraphs	148,548	159,280	157,457
ephones	29,955	33,925	45,187
mmission on money orders, etc.	21,766	23,941	24,676
r Supply and Sewerage—			
tropolitan—Water Supply	166,078	172,358	182,897
ewerage	84,453	86,592	90,692
nter District Water Supply	19,845	22,561	20,340
c school fees	73,519	74,406	73,907
ge, harbour and light rates, and fees	66,259	57,141	47,745
receipts	14,333	12,907	13,622
llaneous services	113,559	116,431	121,949
Gross revenue from Services	4,371,241	4,616,068	4,654,832
Refunds	55,571	53,527	44,286
Net revenue from Services	4,315,670	4,562,541	4,610,546

* Twelve months ended 30th June.

The gross revenue derived annually from each of the principal
and the net revenue from all sources, from 1880 to 1898,
shown in the following statement which has been corrected
issue of this work to allow for the inclusion of certain item
hitherto were classed under Miscellaneous Receipts, but are now
as more properly coming under the head of Services :—

Year.	Railways and Tramways.	Post and Telegraphs.	Water Supply and Sewerage (Metropolitan and Hunter).	Other Services.	Gross Revenue from Services.	Refunds.
	£	£	£	£	£	£
1880	1,189,564	286,134	......	129,758	1,605,456	8,447
1881	1,459,684	330,414	......	168,755	1,958,853	14,743
1882	1,828,094	358,525	......	192,624	2,379,243	15,462
1883	2,081,128	403,794	......	200,972	2,685,894	17,045
1884	2,302,013	442,964	......	218,092	2,963,069	32,368
1885	2,492,691	472,564	......	224,391	3,189,646	39,648
1886	2,389,062	486,210	......	234,671	3,109,943	42,655
1887	2,510,335	524,298	......	230,242	3,264,875	44,138
1888	2,759,280	562,909	90,089	261,276	3,673,554	53,312
1889	2,875,135	597,988	147,071	318,884	3,939,078	55,630
1890	3,013,921	629,894	232,519	310,765	4,187,099	48,407
1891	3,439,283	648,553	245,821	287,198	4,620,855	57,422
1892	3,416,496	650,635	255,641	281,841	4,604,613	58,018
1893	3,253,272	643,849	275,954	257,267	4,430,342	50,925
1894	3,148,720	626,864	275,835	248,451	4,299,870	48,214
*1895	1,454,973	316,888	135,989	116,739	2,024,589	27,361
†1896	3,156,527	676,668	270,376	267,670	4,371,241	55,571
†1897	3,367,552	706,120	281,511	260,885	4,616,068	53,527
†1898	3,368,921	734,759	293,929	257,223	4,654,832	44,286

* Six months ended 30th June. † Twelve months ended 30th June.

net revenue just given should be read with the rates per inhab-
or the same years, which will be found on page 919. The
derived by the Government of the country from services has,
tle interruption, been steadily increasing ; this, however, is only
ould naturally be expected in a growing community, but it is
tory to be able to record that the income, compared with the
ion, has also been fairly well sustained, the check since 1892
ccounted for by the general depression. It will be seen from
le on page 919 that the rate per head in 1897-8 was £3 9s. 8d.;
7, £3 4s. 1d.; and in 1880, £2 3s. 10d. The increase in the
from services is undoubtedly largely due to the construction
ways, from which three-fourths of such revenue are derived.
ed with the population, the value of the production of the
is enormous ; but as much of this production is due to the
ss of the territory, and not directly to the labours of those who
it, its value will, under present conditions, cease to increase at
e rate as does the population; and, moreover, as the revenue
rvices naturally depends upon the amount of production, the rate
abitant will not only cease to increase, but will ultimately decline.

the exception of 84½ miles of private railways, and 6¾ miles of
tramways, the services under these heads are those of State
stration. According to a statement in the Auditor-General's
for 1891, the Railway service yielded a small net profit, after
nses had been met, in 1881 and 1882. Since that time, how-
e railways have not in reality yielded a profit. A proper com-
between earnings and expenditure can only be obtained by
into consideration the fact that the average price obtained for
ns of the colony was 96·37 per £100 of stock ; and as a con-
e, while the actual earnings of the railways cannot be taken at
an 3·60 per cent., the average interest payable, having regard
natter indicated, is 3·63 per cent.

ll be noticeable that during 1897-8 the revenue from both services
ed; but as the expenditure also shows an increase, the gain
country was not so great as the figures would appear to
The tramways in 1888 paid only 1·98 per cent. ; in 1892 and
e net profit equalled 5·28 and 5·51 per cent. respectively ; while
t it declined to 4·07 per cent., and for the year ended June,
further decline to 3·70 was experienced. The questions of rail-
d tramway earnings and expenditure are dealt with at length
hapter on internal communication.

collections under the head of water supply and sewerage include
rns of the Boards operating in the metropolitan area and in the
River district. These Boards form part of the local govern-
cheme, and it is an open question whether the receipts and
iture connected with them should be included in the general
. The loans from which the works have been constructed,

however, form part of the public debt; and the interest payabl therefore, rightly included as an item of the general accounts.

The Metropolitan Board was established in 1888, and the Hu District Board in 1892. The operations of the Boards are more f dealt with in the chapter dealing with local government.

The receipts from the Post, Telegraph, and Money Order ser have increased year by year, but so also has the expenditure. total receipts for the year ended December, 1897, according to Departmental returns, were £861,931; and the expenditure £836,552, showing a surplus on the year's transactions of £25, If the interest payable on the cost of buildings, £32,649, the interes the cost of construction of telegraph lines, £37,296, and the expendi from votes under the control of other Ministers, viz., £25,802 be t into consideration, the total loss during 1897 will be found to am to £70,368.

These services are, as far as possible, conducted on comme principles; nevertheless the desire of the Government to extend facilities of both the post and the telegraph to every part of the co has led to an expenditure which has in each year been in excess of receipts. It is quite possible that the principle of affording the be of postal and telegraphic communication to every district in New S Wales would be adhered to even if the system ultimately faile become self-supporting.

The balance of the revenue collected under the head of ser consists of fees of office, public school fees, pilotage and harbour and other items. The revenue derived from these services, howeve merely nominal, as the cost of the work performed in nearly e case far exceeds the receipts. The gross amount received under head during the year ended 30th June, 1898, was :—

	£
Fees of office	95,749
Public school fees	73,907
Pilotage and harbour dues	47,745
Other fees	18,183
Total	£235,584

GENERAL MISCELLANEOUS RECEIPTS.

All items which cannot rightly be placed under one of the three classes are grouped under the heading of "General Miscellan Receipts," the chief of which are "Rents, exclusive of land," "Forfeit "Balances, transfers, and repayments," and similar accounts. The amount received under each of the main sub-heads, and the gros

venue received under the general head, for 1880 and subsequent are shown in the following statement which has been corrected last issue of this work to allow for the exclusion of certain items hitherto were classed under Miscellaneous Receipts, but are now **led as more properly coming under the head of** Services :—

r.	Rents, exclusive of Land.	Forfeitures.	Balances, Transfers, and Repayments.	Other Miscellaneous Receipts.	Gross Revenue from Miscellaneous Receipts.	Refunds.	Net Revenue from General Miscellaneous Receipts.
	£	£	£	£	£	£	£
0	37,337	997	55,048	141,662	235,044	10,056	224,988
1	53,785	638	19,588	83,262	157,273	14,014	143,259
2	55,476	914	60,586	96,711	213,687	18,015	195,672
3	45,781	636	64,686	125,567	236,670	24,212	212,458
4	53,185	918	48,477	145,744	248,324	21,980	226,344
5	51,040	1,042	68,660	147,877	268,619	14,111	254,508
6	49,228	833	60,180	117,026	227,267	16,204	211,063
7	49,498	983	61,427	162,483	274,391	14,631	259,760
8	62,194	1,043	53,016	146,389	262,642	5,435	257,207
9	64,336	556	110,839	137,400	313,131	6,276	306,855
0	52,741	1,035	68,090	194,241	316,107	11,796	304,311
1	67,622	1,557	44,481	118,690	232,350	15,034	217,316
2	96,021	2,238	36,502	97,881	232,642	6,499	226,143
3	84,819	2,892	54,669	93,179	235,559	8,755	226,804
4	78,215	1,747	87,382	121,146	288,490	6,857	281,633
5	40,899	1,119	35,743	80,582	158,343	3,320	155,023
6	86,193	5,249	100,512	106,892	298,846	9,600	289,246
7	88,471	3,660	64,440	102,858	259,429	10,108	249,321
8	90,029	1,809	29,952	102,891	224,681	19,088	205,593

* Six months ended 30th June. † Twelve months ended 30th June.

HEADS OF EXPENDITURE.

The following table gives the net expenditure under the more import heads for each financial year since 1880. The amounts given herei as well as those shown on page 918, are exclusive of transactions un "Advances made," which, as mentioned previously, are not items expenditure in the proper sense of the term :—

Year.	Net Expenditure on— Railways and Tramways.	Post and Telegraphs.	Water Supply and Sewerage (Metropolitan and Hunter).	Public Instruction.	Interest on Public Debt (Funded and Unfunded).	Other Services.	Tot Net Expend
	£	£	£	£	£	£	£
1880	790,686	387,147	......	400,740	685,094	3,196,648	5,4
1881	730,181	406,473	......	587,578	685,639	3,215,878	5,6
1882	1,015,803	429,930	......	623,701	766,398	3,319,827	6,15
1883	1,425,800	489,013	......	737,969	834,145	4,063,441	7,55
1884	1,558,955	525,001	......	827,290	1,012,322	4,206,629	8,1
1885	1,689,917	557,096	......	762,599	1,262,684	4,082,824	8,3
1886	1,670,170	591,058	......	751,021	1,549,679	4,297,349	8,8
1887	1,658,724	613,354	......	728,835	1,643,522	4,345,482	8,9
1888	1,781,876	593,437	16,536	683,883	1,702,595	3,713,639	8,4
1889	1,768,474	604,370	38,168	707,211	1,760,274	4,122,947	9,00
1890	2,013,451	625,015	61,282	727,910	1,857,656	3,929,355	9,21
1891	2,325,712	669,390	64,656	770,813	1,874,616	4,360,419	10,0
1892	2,120,177	732,829	70,492	858,543	1,715,096	4,434,274	9,93
1893	1,868,293	751,443	79,566	805,330	2,440,326	3,986,700	9,2
1894	1,712,515	733,042	75,126	738,410	2,255,255	3,664,358	9,17
*1895	864,013	385,176	39,681	391,339	1,133,566	2,030,524	4,84
†1896	1,848,749	726,557	74,869	758,199	2,262,997	4,001,686	9,67
†1897	1,800,027	700,905	69,565	707,111	2,267,861	3,894,881	9,44
†1898	1,812,039	694,493	78,020	703,513	2,255,690	3,676,185	9,2

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* Six months ended 30th June. † Twelve months ended 30th June.

It will be noticed that the annual expenditure for the services m has, generally speaking, increased; the revenue has likewise gr but not in a corresponding ratio. To establish the relative positi each, it will be necessary to place the accounts side by side. figures given for the public debt apply only to interest expendit the amount paid for redemptions, which in point of volume is u portant, and the expenditure incurred in the management inscription of stock in London, including the payment of dividends included under the head of "Other Services." The falling-off in expenses of the public debt in 1892 was due to the non-inclusion of sum of £288,759 paid in London during September of that year.

ce of this was received by the Treasury too late to admit of the ınt being charged to the year mentioned, and the expenditure for was in consequence correspondingly increased.

EXPENSES OF GENERAL GOVERNMENT.

ı the figures already given of the revenue of the colony, it will been noticed that the amount received on account of services ered—that is, the earnings of the railways, the tramways, the r supply, and other departments—is included in the general revenue. is almost a matter of necessity so long as the expenditure includes est on the public debt incurred to promote these services. As a equence of this system, the annual cost of maintaining the services red to is also included in the expenditure. The figures given on 932 do not admit of a ready distinction being made between these cinds of expenditure; but as the information is necessary for the right rstanding of the public accounts, the following statement has been iled. It shows the progress of expenditure as classified under headings—ordinary expenditure of general government, including est on capital liability of services connected therewith; and expene on services practically outside the administration of general nment, such as railways, tramways, the Metropolitan and Hunter ict water supply and sewerage, and the interest on capital liability ch of the services enumerated. The figures for the period from 1887 98, and the rates per inhabitant, are as follow :—

	Net Expenditure.			
	On General Government.		On Services practically outside General Government.	
	Total.	Per Inhabitant.	Total.	Per Inhabitant.
	£	£ s. d.	£	£ s. d.
7	6,012,290	5 19 8	2,977,627	2 19 4
8	5,293,763	5 2 3	3,198,203	3 1 9
9	5,735,473	5 7 7	3,265,971	3 1 3
0	5,616,824	5 1 11	3,597,845	3 5 4
1	6,113,186	5 6 11	3,952,420	3 9 1
2	6,267,810	5 6 1	3,663,601	3 2 0
3	6,003,848	4 19 2	3,927,810	3 4 10
4	5,548,131	4 9 8	3,630,575	2 18 8
5	3,046,342	2 8 2	1,797,957	1 8 5
6	6,013,385	4 14 1	3,659,672	2 17 3
7	5,712,125	4 8 0	3,728,225	2 17 6
8	5,445,608	4 2 4	3,774,332	2 17 0

* Six months ended 30th June. † Twelve months ended 30th June.

Under the heading of the expenses of general government cluded civil, military, and legal expenditure, and the cost of th and telegraph services, education, and such public works as a structed out of the ordinary revenue, also the interest payable wh proceeds of loans have been used to defray the cost of their constr The expenditure per head of population on account of some of services, viz., postal and telegraphic, educational, and others importance, has either been stationary or declining.

The general tendency in progressive communities is for the government per inhabitant to decline as population increase operation of this law is traceable in the figures just given. Duri period embraced in the statement, the cost of government has between £4 2s. 4d. and £5 19s. 8d., the years with the least expe per inhabitant being the last five, and that with the highest The position of the State as the constructor of small local prevents that decrease in the expenses of general government is so desirable, and the absence of a law placing the responsibilit the districts concerned has necessitated the expenditure of larg upon works only locally important and not strictly chargeable public revenue.

SPECIAL SUSPENSE ACCOUNTS.

The Centennial Park and the General Post Office New Street R tion Accounts have been made Special Suspense Accounts. The was first operated upon during 1887, and continued part of tl solidated Revenue Fund Account till 1894, when it was pl suspense; and the latter was opened in 1890, and formed part same account till 1892, when it was similarly dealt with. The nial Park account was established under the Centenary Celebrat of 1887, and the other account under an Act passed in 1889, wh amended in 1892. The first-mentioned Act provided for resum a large area of land close to Sydney, 640 acres of which were to apart for the Centennial Park, and the residue to be sold and ceeds of the sale used in reducing the expenditure incurred Park. The latter Act provided for the resumption of certain a the widening and general improvement of the street facing the Post Office. The balance of the land not required for public was to be sold, and the proceeds of sales set against the expe incurred for resumptions and alterations.

The receipts indicated in the subjoined table in connection Centennial Park Account relate to fees received for agistment sale of material, no sales of land having been effected; under th Account a portion of the land has been sold, and the balance occupies a very choice position, is being held pending a more able time for disposal. The large overdraft to each accou orarily met from the trust funds. The position of each account on 0th June, 1898, was as follows :—

r.	Centennial Park Account.		General Post Office New Street Resumption Account.	
	Receipts.	Payments.	Receipts.	Payments.
	£	£	£	£
7	....	20,285	....	....
8	....	66,785	....	....
9	....	56,913	....	....
0	....	26,250	5,811	159,648
1	479	28,040	24	177,730
2	12	1,629	27,216	87,815
3	....	....	102,523	29,947
4	....	....	....	16,047
5	....	....	....	132,929
6	....	24,961	....	696
7	....	....	....	25
8	6	....	466	178
	497	224,863	136,040	605,015
	Dr. £224,366		*Dr.* £468,975	

* Six months ended 30th June. † Twelve months ended 30th June.

TRUST FUNDS.

he Trust Account forms a very important division of the public nces, not only from the nature of the transactions and the volume ccumulated funds, but also by reason of the manner in which the unts are operated upon in conjunction with the general finances of colony. To show the growing importance of the Trust Account, the wing table has been compiled. In 1871 the amount at credit was 3,340; in 1881, £1,671,183; in 1891, £4,997,055; the sum held

in trust has now reached the very large figure of about eight a half millions.

Year.	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£
1871	213,340	1881	1,671,183	1890	3,381,992
1872	321,766	1882	1,884,899	1891	4,997,055
1873	472,437	1883	2,200,896	1892	4,536,756
1874	630,399	1884	2,384,480	1893	5,859,503
1875	757,909	1885	2,515,110	1894	6,544,001
1876	854,571	1886	2,702,486	*1895	7,025,660
1877	1,006,425	1887	2,731,036	*1896	7,657,741
1878	990,284	1888	3,172,056	*1897	8,672,742
1879	986,729	1889	3,175,484	*1898	8,465,818
1880	1,190,130				

* 30th June.

The accounts of which the sum of £8,465,818 at credit at the mid of 1898 is the aggregate, are of a miscellaneous character, the lar being the Government Savings Bank Account of £4,729,697 : the dep of the Savings Bank of New South Wales, £2,165,000 ; the Civil Ser Superannuation Account, £386,912 ; the Master in Equity's Accoun £332,794, and the Railway Stores Account of £208,422. A comp list of the various accounts will be found on page 937. The T accounts are of two kinds—those opened with the Treasury by dep mental arrangement or pursuant to the provisions of an Act of Legislature, and voluntary deposits by public bodies or companies. great bulk of the accounts are of the first kind, comprising £6,296, or nearly 75 per cent. of the gross total; the voluntary deposits am to £2,169,000, the items making up the total being the deposit of Savings Bank of New South Wales of £2,165,000 already menti and the account of the William Roberts bequest, amounting to £4.

The existence of a large account upon which the Treasury is fr operate has been of no little assistance to the Consolidated Reve times past ; in fact, the Trust Funds form a strong reserve on whi Government may fall back in time of need. The great bulk of funds bears interest, whether invested or not; but the power to use t funds enables the Government to effect a saving of interest, as si accommodation from the banks could not be obtained under favourable conditions. At the same time, it cannot be denied tha existence of the funds has been a strong temptation to extravag as without them it would not have been possible to have had the excess of expenditure over revenue that has become so marked a fe of public financing since 1885.

As will be seen on page 938, a sum of £2,327,584 was adv from the Trust Funds for the purpose of taking up Treasury in aid of Revenue. Against these advances, however, must be place Credit Balance of the Consolidated Revenue Fund, viz., £126,262.

ust funds may be divided into two classes—those coming under sions of the Audit Act, and subject to the direct operations of ury ; and those not subject to that Act, and operated upon by s in whose names they stand. Unlike the accounts belonging st-named class, the funds not subject to the Audit Act do not y form part of the public account ; nevertheless, for general ce they are used in the General Banking Account. The dis- etween the two classes of accounts has been maintained in the table, which also shows how the various funds stood invested, mount at credit on the 30th June, 1898 :—

Fund.	Amount at Credit.	Distribution.		
		Amount Invested in Government Securities.	Amount uninvested.	
			On which Interest is paid.	On which Interest is not paid.
Subject to Audit Act.				
	£	£	£	£
Superannuation Account (48 Vic. No. 24)	386,912	338,000	48,912	......
l Fund	654	......	......	654
nnuation Fund	782	......	......	782
Account	216	......	......	216
its Account—				
ent Savings Bank Account	4,729,697	4,217,967	511,730	......
ank of New South Wales Deposit Account	2,165,000	......	2,165,000	......
o Fund, Real Property Act (26 Vic. No. 9)	166,211	140,900	......	25,311
onstruction Store Account	71,020	......	......	71,020
tores Account	208,422	......	......	208,422
Trustee Company (Limited)	20,000	20,000	......	......
t Trustee Company of New South Wales ted)	20,000	20,000	......	......
l Council of Sydney Sinking Fund (50 Vic. 3)	28,759	6,500	22,259	......
cial Deposits	170,878	11,000	15,892	143,986
, subject to Audit Act	7,968,551	4,754,367	2,763,793	450,391
Not subject to Audit Act.				
ales 1,924 Stock Redemption Fund	19,806	......	......	19,806
ales 1,925 Stock Redemption Fund	22,225	......	......	22,225
ales 1,927 Stock Redemption Fund	6,937	......	......	6,937
s Withdrawal Account	110	......	......	110
surer's—				
Equity Account	332,794	276,770	56,024	......
Intestate Estates Account	21,635	......	21,635	......
Lunacy Account	67,998	41,784	26,214	......
in Bankruptcy Account	28	......	28	......
tary Account	1,797	......	......	1,797
of Probates Account	23,937	......	23,937	......
, not subject to Audit Act	497,267	318,554	127,838	50,875
Grand Total £	8,465,818	5,072,921	2,891,631	501,266

With the exception of a portion of the sum deposited in the Trea by the Savings Bank of New South Wales, a general rate of 4 per was allowed to 31st December, 1894, on all funds entitled to inte On the 1st January, 1895, the rate was reduced to 3 per cent. accounts except those on which the old rates could not be altered ti terms of the existing arrangements had expired.

The table just given does not, however, fully illustrate the us which the trust funds have been put; the following figures are nece to the proper understanding of an important phase of the public acco On the 30th June, 1898, of trust funds there were invested in—

	£
Debentures, Stock, and Miscellaneous Securities......	2,781,695
Treasury Bills	2,327,584
Fixed Deposits in Banks..............................	135,000
Advanced to General Loan Account	1,500,000
Used for general purposes	1,721,539
Total..	£8,465,818

Trust moneys deposited with the Treasury, on which no intere paid, amount to £501,266, while on the £5,072,921, in debenture and Treasury bills, the annual payment is £172,823, or at the ra £3 8s. 1d. per cent.

The distribution of the fund on the 30th June, 1898, accordin the rates of interest, was as follows :—

Securities, etc.	Rate of Interest per cent. per annum.				
	2½	3	4	5	T
	£	£	£	£	
Treasury Bills in aid of Revenue...	...	1,939,084	388,500	...	2,3
Funded Stock—					
New South Wales, 4 per cents.	...	....	296,467	...	2
New South Wales Funded Stock (56 Vic. No. 1) ...	...	....	1,134,770	...	1,1
New South Wales Funded Stock (58 Vic. No. 14) ...	...	30,000	....	...	
New South Wales Funded Stock (59 Vic. No. 6) ..	...	880,000	....	...	8
New South Wales 1924 Stock	...	20,000	....	...	
New South Wales 1925 Stock	...	150,000	....	...	1
Debentures	...	....	224,400	9,700	2
Uninvested bearing interest.........	8,000	2,812,460	71,171	...	2,8
Total	8,000	5,831,544	2,115,308	9,700	7,9

It is the practice of the Treasury to place at fixed deposit portion of the trust funds not invested and held in excess of imme ents; the amount so deposited was £135,000 with the City 3ydney. According to the rates allowed, the amount of interest these deposits was £3,500; the rates, however are liable ried according to the state of the working account of the ıds. The total amount of interest received by the Treasury he year ended June, 1898, on fixed deposits and other nts was £14,142, nearly the whole of which was earned by elonging to the Trust Account.

ust funds' under the Audit Act remaining unclaimed for a f two years, and balances of intestate and probate estates unfter a lapse of six years, are transferred and surrendered to the ıted Revenue, and no person can legally claim moneys so dealt vertheless, the Treasury invariably recognises and pays in all ere an otherwise valid claim can be shown. The amount transthe Consolidated Revenue for each of the last ten and a half given below; the figures are gross, as the sum refunded cannot but this is by no means considerable in any one year:—

Year.	Amount.	Year.	Amount.
	£		£
1888	22,101	1894	12,659
1889	52,735	*1895	18,017
1890	20,607	†1896	35,276
1891	16,713	†1897	21,588
1892	13,767	†1898	9,991
1893	15,194		

* Six months ended 30th June. † Twelve months ended 30th June.

Loan Appropriations.

ems of expenditure to be provided for by loan are authorised n Appropriation Act, in the same manner as the ordinary ure chargeable to the general revenue; a separate Act, however, passed before the money so appropriated can be lawfully 1. There is a further restriction to the expenditure of money, from loans or revenue, in the operation of the Public Works 1888. Under the provisions of this Act, the question of the lity of carrying out all works estimated to cost more than , except those connected with military and naval defence and itenance of railways, is referred by resolution of the Legislative y to the Parliamentary Standing Committee appointed during Session of each Parliament. The Committee investigates and o Parliament, and the Assembly by resolution declares whether it is expedient or not to carry out the proposed work ; an declaration is in the affirmative, a Bill embodying such resoluti be passed before the authorisation is absolute. The Loan Act authorised the raising of a loan of £2,233,537 for services show subjoined table :—

Services.	Amount—		
	For which no provision is made for Sinking Fund.	For which provision is made for Sinking Fund.	
	£	£	
Railways—			
Existing Lines	300,000	....	
Construction Branch	366,614	....	
Tramways—			
Existing Lines	60,000	....	
Construction	75,000	....	
Harbours and Rivers	179,100	60,250	
Sewerage Construction	28,500	....	
Metropolitan Water Supply and Sewerage	401,000	....	
Government Architect	206,773	64,400	
Roads and Bridges	....	57,000	
Department of Mines and Agriculture—			
Agricultural Colleges and Experimental Farms	....	50,000	
Public Watering-places, Artesian Wells, &c.	....	100,000	
Miscellaneous Services—			
Telegraphs and Telephones	50,000	....	
Military Works	35,200	....	
Government Printer (Machinery)	....	2,000	
Total for Works	1,702,187	333,650	2,(
To meet 5 per cent. Debentures due 1899			1
Total Loans Authorised during 1898			2,2

It will be seen that provision is made for redeeming a po the proposed loan by a sinking fund. This principle of rede from revenue has been applied to expenditure on works or whose value will disappear by the time the loan out of the proc which they were constructed falls due.

Loan Appropriations for each year from 1875 to 1898 are given subjoined table, the amounts proposed to be expended on public being distinguished from those required for redemption of pre- ans :—

Year.	Amount authorised—		
	For Public Works and Services.	For Redemption of Loans.	Total.
	£	£	£
1875	....	....	....
1876	2,236,000	....	2,236,000
1877	1,120,000	....	1,120,000
1878	....	....	....
1879	7,352,768	....	7,352,768
1880	1,262,000	....	1,262,000
1881	8,807,500	....	8,807,500
1882	....	....	....
1883	2,000,000	....	2,000,000
1884	14,388,303	....	14,388,303
1885	....	....	....
1886	3,115,393	....	3,115,393
1887	....	....	....
1888	3,641,305	1,390,600	5,031,905
1889	4,366,696	723,200	5,089,896
1890	4,982,957	2,038,800	7,021,757
1891	4,000,000	....	4,000,000
1892	4,414,568	....	4,414,568
1893	839,806	40,000	879,806
1894	1,690,662	832,000	2,522,662
1895	1,555,200	977,400	2,532,600
1896	2,205,576	65,800	2,271,376
1897	1,847,552	177,200	2,024,752
1898	2,035,837	197,700	2,233,537

Appropriations are invariably in excess of the amount actually d for expenditure, and it has frequently happened that beyond ng Parliamentary sanction no further action has been taken in to loans authorised to be raised, and the last statement of public ts shows that loans to the extent of some thirteen millions were sed, the bulk of which will in all probability never be issued.

LOAN ACCOUNT.

Loan account was not established until 1853, although the of raising money by loans was introduced as early as 1842. st ten loans of the colony, which were issued under *Gazette* for immigration purposes, were raised on the security of the or, as it was called, the Territorial Revenue; but only £329,700 deemed from that source, the balance being made a liability of the Consolidated Revenue, and as such eventually included in the Loan Account under the head of Redemptions. From 1853 to 1870 the proceeds of loans were paid into and formed part of the Consolidated Revenue Fund; but during the year last mentioned a different principle was introduced, and a separate account was opened apart from Revenue for each loan floated, while the amount then at credit of the old loans continued to be operated upon in conjunction with the Revenue Account until 1891, when the account was finally closed. The system of separate Loan Accounts continued for about nine years; but in 1879, under authority of the Loan Fund Amalgamation Act, the nine separate Loan Funds then existing were merged into one "General Loan Account," into which also the proceeds of all loans thereafter raised were to be paid. The present system is open to technical objection, as it admits of the expenditure of money on services for which no loan has been raised; but it has the great merit of saving interest, and rendering unnecessary the raising of loans when the Treasury has large sums in hand, the proceeds of former loans.

The following figures show the amount of loans raised from the commencement of the Loan Account to the 30th June, 1898, and the proceeds available for expenditure:—

Treasury Bills, Debentures, Inscribed and Funded Stock sold from 1842 to 30th June, 1898	£78,635,300
Discount, bonus, and charges	2,857,440
Net amount realised	£75,777,860
Add net amount transferred from Consolidated Revenue to make good amount short-raised	128,007
Add amount advanced from Consolidated Revenue	1,500,000
Add amount advanced by Curator of Intestate Estates in anticipation of loans	50,000
	£77,455,867
Less proceeds of old loans not included in Loan Account	724,733
Sewerage Works taken over from Municipal Councils, Ashfield and North Sydney	5,900
	730,633
Sum available for expenditure	£76,725,234

The use to which the sum just stated was put is shown in the following table. It will be observed that a sum of £12,747,830 for redempti of loans is included in the total; this amount was not, of course, item of expenditure, but its inclusion is necessary to fully account f

›f £76,725,234, in which the original loans as well as the ı loans were included :—

›n—		£
ys		38,687,253
ays		1,945,605
›phs and Telephones		980,214
Supply and Sewerage		8,324,528
›s		1,531,630
		320,298
rs and Rivers		2,488,226
Works and Buildings		2,846,533
ınd Bridges		1,048,911
ations and Military Works		1,271,654
ation		194,430
Instruction—School Buildings, etc.		430,019
in Queensland prior to separation		49,855
		£60,119,156
›tions—		
ıns redeemed from Proceeds of New Loans...	£11,397,830	
›asury Bills in aid of Revenue paid off	1,350,000	
		12,747,830
›y Bills in aid of Revenue current		2,327,584
Balance of Loan Account on 30th June, 1898		1,530,664
Total (as shown on previous page)		£76,725,234

ı actually expended from loans was, therefore, £62,446,740, the ınake up the total of £76,725,234 being represented by redemp- credit balance of the sum mentioned, £51,789,528, or nearly t., has been expended on directly productive works yielding or yielding revenue towards meeting the charges for interest. ıe sum just referred to, £6,813,689 has been spent on other permanent nature, such as roads and bridges, improvements s and rivers, lighthouses, schools, and public buildings, which, directly productive, have been undertaken for the development ırces of the colony, and for facilitating settlement. The balance ,740, viz., £3,843,523, has been expended in reduction of the in revenue of 1894 and previous years and on unproductive ıe items being £2,327,584 in reduction of the deficiency in f 1894 and previous years, £1,271,654 for fortifications and vorks, £49,855 for public works in Queensland prior to , and £194,430 for the promotion of immigration. The figures represent the expenditure on immigration under responsible ıt, prior to the assumption of which £724,733 was expended vice, making a total expenditure of £919,163 for the encourage- ımigration.

The loan expenditure on account of the various services from 18
1898 was as follows :—

Head of Service.	1894.	*1895.	†1896.	†1897.
	£	£	£	£
Railways	508,669	235,245	378,094	454,189
Tramways	93,766	16,108	8,031	22,635
Telegraphs and Telephones	5,202	7,442	36,709	68,654
Water Supply and Sewerage—				
Water Supply—				
Metropolitan	24,117	27,204	88,159	101,919
Hunter District	......	2,218	16,753	21,903
Country Towns and Mining Townships	55,425	46,938	41,311	29,880
Sewerage—				
Metropolitan	204,499	84,707	154,754	167,782
Buildings and Stores	5,059	157	920	5,165
Hunter District	......	......	......	......
Country Towns	......	206	2,381	16,250
Water Conservation and Irrigation	32,566	11,736	48,297	97,179
Harbours and Rivers Navigation—				
Wharfs, including resumption	140,953	24,977	42,667	39,621
Docks	......	......	......	1,555
Harbours	41,578	44,550	94,087	55,859
Rivers	47,610	62,616	40,452	81,044
Navigation	160	1,591	15,088	6,070
Alteration of Dredges	......	......	......	12,301
Reclamation Works	......	......	......	43,332
Roads and Bridges	28,097	5,820	40,992	55,604
Fortifications and Military Works, and Naval Station, Sydney Harbour	48,979	11,624	21,975	11,192
Public Works, Buildings, &c.—				
Charitable Institutions	42,708	11,229	30,446	56,734
Administration of Justice	4,077	9,078	63,331	49,156
Educational	4,218	7,498	21,788	32,306
Public Instruction, School Buildings, &c.	2,000	109	1,006	14,000
Other Public Buildings and Works	40,963	32,173	79,726	52,020
Purchase of Sites and Erection of Buildings for Local Land Boards and Survey Offices	......	......	......	4,471
Forest Reserves, for thinning out and improving	......	13,489	39,518	11,902
Compensation for cancellation under Mining Act of 1889	......	......	4,353	13
To promote settlement under Crown Lands Act of 1895	......	......	......	36,678
Hay Irrigation Works	......	......	......	......
Clearing and Improving Crown Lands	......	......	......	......
Jenolan Caves — For resumption of Accommodation House, and to provide improved buildings	......	......	......	......
	1,330,046	656,625	1,270,898	1,548,105
Less Repayment to Credit of Votes, &c. £	......	......	......	‡70,787
	1,330,046	656,625	1,270,898	1,477,318
Municipal Works taken over by the State (the expenditure on these Works is not rightly chargeable to the years in which the transfers were made)	......	2,500	8,200	......
Total Expenditure on Public Works, &c. £	1,330,046	659,125	1,279,098	1,477,318
Loans repaid by New Loans (including Treasury Bills)	1,250,400	821,900	1,224,200	2,201,800
Total £	2,580,446	1,481,025	2,503,298	3,679,118

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* Half-year ended 30th June. † Year ended 30th June. ‡ This amount is
over-issues, Loan Votes Account, which was transferred to the General Loan Account in
the repayment which should be credited to each year cannot be distinguished, and the
has, therefore, been deducted from 1896–7.

During the four and a half years ended 30th June, 1898, £1,912,201 has been expended upon railways, £225,671 on tramways, £162,835 on telegraphs and telephones, £648,969 on water supply for the Metropolitan ard Hunter River Districts and Country Towns and Mining Townships, £936,766 on sewerage for the Metropolitan District and Country Towns, and £240,433 for Water Conservation and Irrigation. For the purpose of thinning out the forest reserves of the colony, with the object of improving the character of the timber remaining, an amount of £72,049 has been spent, and £78,092 has been disbursed on the general improvement of Crown Lands to promote settlement under the Crown Lands Acts in force. Most of the foregoing items were for services likely to e permanently revenue producing, or deemed necessary for the proper evelopment of the colony; it must, however, be confessed that there as been some expenditure on works and services for which there will be a few years no substantial assets remaining. Items of this kind it is tended in future to pay for altogether out of revenue, or if out of loans, provide for their ultimate payment out of revenue by means of a nking fund.

In the early stages of Australasian borrowing the expenditure was oderate, loans were hard to raise, and interest high; but latterly, as he conditions under which loans could be contracted became favourable, specially since 1875, few of the colonies set any bounds to their require-ents. It was a repetition of the old experience, the opportunity ngendered the desire, and the open purses of the investors tempted the olonies to undue borrowing and lavish expenditure. What is termed a vigorous public works policy" was the order of the day, and works ere pressed forward which under other circumstances would not have een undertaken, or have been held back until the growth of population arranted their construction. The plethora of money has been harmful n many ways, but is most apparent in the construction of not a few ranch railways in outlying and sparsely-settled districts which do ot pay even their working expenses, with the consequence that the nterest on loan capital has to be met out of general revenue, and n some instances the present generation will pass away before this ondition of affairs will be remedied. But when every allowance has een made for unwise or improvident expenditure, it will be found hat by far the larger portion of the proceeds of loans has been well xpended. In some instances, as the subsequent pages show, it will e years, taking a most hopeful view of the situation, before the evenue-producing works will yield a sum sufficient to pay working xpenses and interest; nevertheless, a practical consideration of the onditions which surround Australasian settlement will demonstrate hat in some instances the construction of these works was stifiable, for apart from the certainty that they will ultimately be lf-supporting, they have already materially assisted in developing he country's resources, and have largely enhanced the value of the ublic estate.

The loan expenditure, exclusive of payments on account of rela tions, during each year and up to the end of each period since 1 was as follows:—

Year.	During each year.		At the close of each year.	
	Amount.	Per inhabitant.	Amount.	Per inhabitant.
	£	£ s. d.	£	£ s. d.
1874	529,783	0 18 9	9,787,876	17 0 6
1875	1,149,152	1 19 4	10,937,028	18 8 1
1876	707,511	1 3 5	11,644,539	18 19 2
1877	995,353	1 11 8	12,639,892	19 12 9
1878	815,116	1 4 9	13,455,008	20 0 6
1879	1,271,705	1 16 10	14,726,713	20 15 2
1880	1,668,638	2 5 8	16,395,351	21 18 5
1881	2,397,368	3 2 8	18,792,719	24 0 7
1882	2,832,759	3 10 11	21,625,478	26 10 8
1883	3,265,711	3 15 10	24,891,189	28 18 0
1884	3,674,706	4 3 2	28,565,895	31 11 4
1885	3,896,145	4 4 0	32,462,040	34 3 9
1886	3.766,356	3 17 8	36,228,396	36 12 5
1887	1,965,019	1 19 1	38,193,415	37 8 8
1888	2,076,307	2 0 1	40,269,722	38 6 3
1889	1,464,900	1 7 6	41,734,622	38 11 7
1890	2,299,751	2 1 9	44,034,373	39 5 0
1891	4,750,167	4 3 1	48,784,540	41 17 3
1892	3,014,680	2 11 0	51,799,220	43 5 0
1893	1,929,580	1 11 11	53,728,800	43 18 4
1894	1,330,046	1 1 6	55,058,846	43 19 11
*1895	659,125	0 10 7	55,717,971	43 18 9
†1896	1,279,098	1 0 1	56,997,069	44 3 10
†1897	1,477,318	1 2 9	58,474,387	44 12 5
†1898	1,644,769	1 4 10	60,119,156	45 0 2

* Six months ended 30th June. † Twelve months ended 30th June.

Previous to 1875 the loan expenditure on works was moderate calls for no special comment. In the year named, however, the a spent was more than double that of 1874, and that year may be c sidered the starting-point of the vigorous public works policy alre alluded to. The figures in the table speak for themselves. In reg to the year 1891, and in some degree to 1892, it may be as well to n that there was a large expenditure on account of quadrupling a porti of the main line in the metropolitan area—a work of urgent necessi without which the Railway Commissioners professed themselves una to work with safety and efficiency the large interests entrusted to the Besides this expenditure, a sum of £1,000,000 was expended on rec struction of rolling stock and permanent way, which, being for renewa was properly a charge against working expenses, but the sum w advanced to the Commissioners from the General Loan Account i ordance with a special Act of the Legislature, to be repaid by them sumably out of the earnings of the railways under their control— annual payment in redemption of the advance being fixed at 5,000. It has been pointed out in another part of this chapter that railways did not earn sufficient to meet the whole of the annual rest chargeable on the debt liability, so that the payment of the talment in the manner provided was an impossibility ; and although sum of £75,000 appears in the public accounts as being repaid from way earnings, it is in reality a charge on the general revenue of the ony.

The growth of the loan expenditure, so marked in the past decade, hardly likely to be continued, as apart from the salutary check posed by the investigations of the Parliamentary Standing Com- ttee on Public Works, railway construction, for which most of the ns have been raised, will in the future be confined to perfecting the ious systems in operation, and to the gradual extension of the coast es north and south.

History of the Public Debt.

When in 1831 it was decided to abolish the system of free land ants, and to dispose of the public estate by auction in lieu of private der, it was also decided that the proceeds of land sales should be paid to what was called the Land Fund, from which were to be paid the arges incident to the introduction of immigrants ; and it was from the ability of the Land Fund to meet these charges that the public debt New South Wales first had its rise. From 1831 to 1841 the Land nd was sufficient, but in the year last named the engagements for migration purposes were so heavy that it became necessary to supple- ent the Fund in some way, and for this purpose it was decided by the vernor to borrow on the security of the Territorial or Land Revenue. cordingly, on the 28th December, 1841, a debenture loan of £49,000 s offered locally under *Gazette* notice. This loan was issued during 42 in two instalments, the nominal rates of interest being 5¼d. and per cent. respectively per diem. The loan at the higher rate was sed at par, and the other at a discount of 2 per cent. This was the first n floated in the colony, as well as the first raised by any of the stralasian Governments. Including those just mentioned, there were ed between the years 1842 and 1855 ten loans, amounting in the regate to £705,200, the proceeds of which were devoted to the herance of immigration. Debentures representing these immigration ns were redeemed to the value of £329,700 from the Territorial venue, while the balance of £375,500 was taken over as a liability the general revenue of the colony, and ultimately became incor- ated in the public debt. In addition to the Immigration Loans,

there were others, six in number, authorised by Acts of C
These were not all issued until after responsible government wa
claimed. Under the authority of the above mentioned Acts, th
instalment of a loan for £683,300 was placed on the London m
during the years 1854 and 1855. This was the first Australasia
issued in England, and the forerunner of numerous others, repres
a liability of over £231,000,000 outstanding in 1898.

The Public Debt in November, 1855, when responsible govern
was proclaimed, was £1,000,800, distributed under the foll
heads :—

Raised on the Security of Territorial Revenue—	
Immigration	£423,00
Sydney Railway Company's Loan	217,50
Raised on the Security of General Revenue –	
Amount for Sydney Sewerage	54,90
,, ,, Sydney Water Supply	28,00
,, ,, Railways	256,40
,, ,, Public Works	21,00
Total	£1,000,80

Of the total shown above, £47,500 was redeemed out of the Terr
Revenue : the remainder, although afterwards nominally redeem
new loans, in reality forms part of the existing public debt.

The debt outstanding at each quinquennial period is given
subjoined table. It will be seen that the appetite for borr
has increased with the growth of population. From 1850 to 18
average annual increase of indebtedness was £370,000 ; from 1
1870, £585,000 ; from 1870 to 1880, £522,000 ; from 1880 t
£3,348,000 : and from 1890 to 1898, £1,963,000 :

Year	Amount.	Year.	Amount.	Year.	Amount.
	£		£		£
1842	49,500	1860	3,830,230	1880	14,9[illegible]
1845	97,900	1865	5,749,630	1885	35,5[illegible]
1850	132,500	1870	9,681,130	1890	48,383,[illegible]
1855	1,000,800	1875	11,470,637	*1898	63,112,72

* 30th June.

The increase has been most marked since 1880, the period c
by the following table, which contains the more important part

essary for a right understanding of the public loan accounts. amount of bonds or stock sold has been placed against the r in which the sales were effected, and not, as is the practice the Treasury, against the year in which they were brought to ount :—

31st December.	Treasury Bills, Debentures, and Stock at close of each year—								
	Authorised.	Sold.	Redeemed.			Unredeemed (Outstanding Public Debt).			
			From Consolidated Revenue.	By New Loans.	Total.	Total.	Per Inhabitant		
	£	£	£	£	£	£	£	s.	d.
880	27,333,964	17,986,519	1,371,870	1,710,730	3,082,600	14,903,919	19	18	6
881	36,141,464	20,040,719	1,405,970	1,710,730	3,116,700	16,924,019	21	12	10
882	36,141,464	22,040,719	1,608,770	1,710,730	3,319,500	18,721,219	22	19	5
883	38,141,464	28,045,719	1,702,530	1,710,730	3,413,260	24,632,459	28	12	0
884	51,824,267	33,550,719	1,738,030	1,710,730	3,448,760	30,101,959	33	5	3
885	51,824,267	39,050,719	1,775,730	1,710,730	3,486,460	35,564,259	37	9	1
1886	54,939,660	44,550,719	1,805,740	1,710,730	3,516,470	41,034,249	41	9	6
1887	54,939,660	44,560,719	1,854,640	1,710,730	3,565,370	40,995,349	40	3	7
1888	60,056,565	48,188,619	1,897,740	2,197,830	4,095,570	44,093,049	41	19	0
1889	65,146,461	53,595,719	1,943,240	3,098,930	5,042,170	48,553,549	44	17	8
1890	74,929,218	54,331,503	2,131,240	3,816,930	5,948,170	48,383,333	43	2	6
1891	74,929,218	59,325,703	2,311,640	4,063,330	6,374,970	52,950,733	45	8	10
1892	83,119,494	62,837,203	2,501,340	5,862,430	8,363,770	54,473,433	45	9	8
1893	84,015,300	67,919,103	2,687,340	5,902,730	8,590,070	59,329,033	48	9	11
894	86,537,962	69,058,533	2,879,250	7,153,130	10,032,380	59,026,153	47	3	4
895	86,540,462	69,086,213	2,890,250	7,975,030	10,865,280	58,220,933	45	18	2
896	87,257,462	74,673,353	3,062,750	9,199,230	12,261,980	62,411,373	48	7	9
897	89,533,238	76,240,078	3,764,550	11,401,030	15,165,580	61,074,498	46	11	5
898	91,557,990	78,635,300	4,118,850	11,403,730	15,522,580	63,112,720	47	4	11

* 30th June.

In dealing with the figures under the head of loans redeemed, it must borne in mind that the loans paid off from revenue can alone be said be redeemed. Where an old loan is redeemed out of the proceeds of bsequent loans, there is merely a change in the form of the liability, ith, as a rule, some reduction of the interest charge.

The following table shows the annual payments under each interest and expenses of the public debt since 1887. For the y the figures shown for interest do not represent the actual li that year, as the sum of £288,750, properly chargeable to 1 not brought to account until the following year, otherwise th are correct :—

Year.	Interest.	Redemptions (including premium on purchase of Debentures on account of Railway Loan, 31 Vic. No. 11).	Expenses connected with management of Inscribed Stock, Bank of England.	Commission paid to Financial Agents in England and New South Wales.	Annual Intere Charges p
					Total.
	£	£	£	£	£
1887	1,643,522	50,773	11,903	3,563	1,709,761
1888	1,702,595	44,588	13,160	2,862	1,763,205
1889	1,760,274	49,519	14,426	4,292	1,828,511
1890	1,857,656	39,203	15,855	3,068	1,915,782
1891	1,874,616	105,400	16,680	2,389	1,999,085
1892	1,715,096	115,196	18,259	3,410	1,851,961
1893	2,440,326	111,897	19,057	1,384	2,572,664
1894	2,255,255	107,502	19,952	1,869	2,384,578
*1895	1,133,566	21,561	10,249	827	1,166,203
†1896	2,262,997	261,752	16,923	1,718	2,543,390
†1897	2,267,861	416,113	18,626	2,353	2,704,953
†1898	2,255,690	300,248	18,600	1,941	2,576,479

* Six months ended 30th June. † Twelve months ended 30th June.

At present the net revenue from the public works of the co entirely comprised in that derived from railways, tramways, a supply and sewerage. Electric telegraphs, docks, and wharfs, in the same category, do not at present yield a surplus. T and sewerage works of the Metropolitan area are not yet c but these services are self-supporting ; that is, the revenue is to meet the amount required to be expended on maintenance, ment, depreciation, and interest on capital liability. When, these undertakings are completed, and the railways are in full the sum available to meet interest and other charges on the pu should leave little to be made good from the general revenue of t

The public debt is partly funded and partly unfunded, t debt comprising debentures, inscribed and funded stocks ; an funded, Treasury bills. The two classes are defined by the dif currency, the funded debt being long-dated loans, and the short-dated loans. Originally the term "funded" was applie interminable stocks, the amount of which, £532,889, is, as with the total debt, unimportant ; but it is now the practic this term also to redeemable debts. The amounts outsta

)th June, 1898, under each class, and the total debt, were as :—

Description of Stock.	Amount outstanding, 30th June, 1898.		Annual Interest thereon.
ed Debt—			
bentures—	£	£	£
)verdue, or unpresented, which have ceased to bear interest	3,950	....	....
3till bearing interest	10,485,200	....	442,213
S. Wales 4 per cents. (Interminable)...	530,189	....	21,208
S. Wales Funded Stock, 56 Vic. No. 1	2,549,350	....	101,974
S. Wales Funded Stock, 58 Vic. No. 14	863,947	....	25,918
S. Wales Funded Stock, 59 Vic. No. 6	1,332,665	....	39,980
,, ,, ,, 60 Vic. No. 32	83,015	....	2,490
S. Wales 1924 Stock	198,065	....	5,942
,, 1925 ,,	222,255	....	6,668
scribed Stock	44,512,500	....	1,578,869
Total, Funded Debt	....	60,781,136	....
nded Debt—			
easury Bills (for Loan Services)—			
)verdue or unpresented, which have ceased to bear interest	4,000	....	....
easury Bills (Deficiency in Revenue)	2,327,584	....	73,712
Total, Unfunded Debt	....	2,331,584	....
Total Public Debt	....	63,112,720	2,298,974

following table shows the total amount of stock under each rate rest. The stock bearing 6 per cent. represents the loans raised Municipalities of Sydney and Balmain for water and sewerage now taken over by the State. With the exception of municipal o the amount of £58,000 due in 1904, and £2,700 in permanent ill the loans bearing 5 per cent. interest will mature in or before There were, however, also overdue 5 per cent. debentures to the ; of £3,950 outstanding on the 30th June, 1898, which have to bear interest :—

Interest—Per cent.	Amount of Stock.	Annual Interest thereon.
	£	£
6	94,500	5,670
5½	4,500	247
5	*2,086,850	104,145
4½	3,700	167
4	†21,457,939	858,158
3½	29,326,200	1,026,417
3	10,139,031	304,170
Total	63,112,720	2,298,974

ncludes £3,950 overdue debentures. † Includes £4,000 overdue Treasury Bills.

3 per cents. comprise the £1,500,000 floated in London during y, 1898; Funded Stock raised locally under Acts 58 Vic. No. 14, . No. 6, and 60 Vic. No. 32; and Treasury bills representing Funds in the hands of the Government, and so invested. The of these Treasury bills bore interest at the rate of 4 per cent. to ber 31, 1894, but the rate of interest on a large proportion was l to 3 per cent. from the 1st January, 1895.

DATES OF MATURITY.

The dates of repayment extend from 1898 to 1935 : the s payable in the different years vary considerably in amount, the sum in any one year being £16,698,065 in 1924. The redem such a large amount in one year is happily far distant, and b arrives a more satisfactory procedure in dealing with loans fall will be devised than now obtains. The question of the consolid loans has received some attention, and any scheme of conso adopted will probably provide for the principle of redemption specified time, at the option of the Government, and not on a gi as is the present practice.

The following table shows the due dates and the amount re in each year :—

Class of Security.	Interest Rate.	Amount raised in— London.	Amount raised in— Sydney.	Total Out-standing.	Ye
		£	£	£	
Debentures	5	3,700	250	3,950	Overd
,,	5	....	177,200	179,700	1898.
,,	6	....	2,500		
,,	5	127,900	69,800	197,700	1899.
,,	5	857,100	....	861,600	1900.
,,	5½	....	4,500		
,,	5	374,900	....	420,900	1901.
,,	6	....	30,000		
,,	5	16,000	....		
,,	5	399,300	....	459,000	1902.
,,	6	....	59,700		
,,	4	1,000,000	....	1,053,700	1903.
,,	4½	3,700			
,,	5	58,000	....	58,000	1904.
,,	6	....	2,300	963,800	[illegible]
,,	4	961,500	....		
,,	4	....	224,900	224,900	[illegible]
,,	4	1,450,000	....	1,450,000	[illegible]
,,	4	1,790,500	....	1,790,500	[illegible]
,,	4	2,863,700	....	2,863,700	1910
,,	4	60,000	....	60,000	
N.S.W. Funded Stock	4	....	2,549,350	2,549,350	[illegible]
,,	3	....	2,279,627	2,279,627	
Inscribed Stock	3½	12,826,200	....	12,826,200	[illegible]
,, ,,	3½	16,500,000		16,500,000	1924.
N.S.W. 1924 Stock	3	....	198,065	198,065	
,, 1925 ,,	3	....	222,255	222,255	[illegible]
Inscribed Stock	4	9,686,300	....	9,686,300	[illegible]
,,	3	5,500,000	....	5,500,000	[illegible]
N.S.W. 4 per cents.	4	....	530,189	530,189	[illegible]
Permanent Debentures	5	....	2,700	2,700	[illegible]
Funded Debt	..	54,427,800	6,353,336	60,781,136	
Treasury Bills (Deflc. of Rev.)	3	....	1,939,084	1,939,084	[illegible]
	4	....	388,500	388,500	[illegible]
,, ,, (For Loan Services)	4	4,000	....	4,000	Overd
Unfunded Debt	.	4,000	2,327,584	2,331,584	
Total Public Debt	..	54,431,800	8,680,920	63,112,720	

As will be seen in the above table, New South Wales is i to the London market for almost the whole of the money raise

. This dependence on the English market was originally due to lack of local capital ; but of late years, when such capital has been ly abundant, the Government has still turned to London, where the of interest at which it could borrow was much below what would been demanded by the local capitalists. The local and English s are now much nearer than at any period in the history of Australia, it is probable that the Government could place small loans almost dvantageously in Sydney as in London.

Financial Agents.

ince the inception of responsible government, the colony has had cial local and London agencies to conduct its banking business. The k of New South Wales was first appointed, and under its auspices first external loan of 1854 was issued. The Oriental Bank Cor- ation negotiated all subsequent loan issues until 1869, when the k of New South Wales again took up the management of loan rations in London. In 1884 the business was transferred to the ociated Banks, which were represented in England by the London Westminster Bank. On the 31st December, 1889, the agreement h the Associated Banks came to an end, and on the first day of the ceeding year the London and Westminster Bank became the colony's horised agent to transact such financial business connected with the don account as was not undertaken by the Bank of England, while Associated Banks divided amongst them the local business. This angement continued until the crisis in 1893, when the Bank of New th Wales again became sole local agent for the Government. ring 1895–6 a current account was opened at the City Bank of ney, and during 1896-7 a similar account was opened at the mmercial Banking Company of Sydney, Limited.

The Bank of England has been the colony's agent for the issue and nagement of stock since 1884, although this institution inscribed the k of the loan of 1882 and the two issues of 1883, negotiated in don by the Bank of New South Wales. Its charges for negotiation management are, however, higher than those of the London and stminster Bank, which acts in a similar capacity for Victoria, stern Australia, and Tasmania. The prestige of the former insti- ion no doubt influenced the Government in its choice of an agent. tside inscribed stock transactions the Government prefers accepting from other banks in issuing loans, and accordingly the London Westminster Bank during 1892 and 1893 issued and negotiated 250,000 Treasury bills.

Charges on Floating Loans.

The charges incidental to the floating of an inscribed stock loan in gland are heavy. The chief expense is the composition duty of 12s. 6d. cent. to the British Government on inscribed stock. The other

charges—bank commission, ½ per cent.; brokerage, ¼ per cent
minor expenses which amount to about 1s. per cent.—are for s
rendered.

The expenses incurred for the inscription and management o
by the Bank of England, through which New South Wales ma
issues, including the payment of the half-yearly dividends, ar
per million for the first ten millions, £450 for the next five, an
per million for all subsequent amounts. Prior to March, 18
charges were £100 per million more in each case.

The subjoined statement gives the charges of negotiation of t
last loans issued by the colony in debenture form and of the in
stock loans floated during the period 1883-98:—

Year when Floated.	Amount of Principal.	Gross Proceeds.	Charges.				Expenses pe
			Stamp Duty.	Bank Commission.	Brokers' Commission, Postage, and Petty Expenses.	Total.	Principal.
	£	£	£	£	£	£	£
			Issued (in London) as Debentures.—Bank of New South Wales.				
1881	2,050,000	2,120,697	2,562	3,813	5,298	11,673	0 11 5
1882	2,000,000	2,042,968	2,500	3,750	5,189	11,439	0 11 5
			Issued (in London) as Inscribed Stock.—Bank of England.				
1883	3,000,000	3,001,067	18,750	5,000	7,500	31,250	1 2 0
1883	3,000,000	3,018,791	18,750	5,000	7,809	31,559	1 2 3
1884	5,500,000	5,152,386	34,375	27,500	14,289	76,164	1 7 8
1885	5,500,000	5,042,041	34,375	27,500	14,436	76,311	1 7 9
1886	5,500,000	5,247,692	34,375	27,500	14,481	76,356	1 7 9
1888	3,500,000	3,626,341	21,875	17,500	9,380	48,755	1 7 10
1889	3,500,000	3,584,105	21,875	17,500	9,379	48,754	1 7 10
1891	4,500,000	4,276,030	28,125	22,500	11,784	62,409	1 7 9
1891	294,200	294,200	1,839	176	696	2,711	0 18 5
1893	200,000	191,350	1,250	Nil.	500	1,750	0 17 6
1893	2,500,000	2,514,861	15,625	12,500	6,853	34,978	1 8 0
1894	832,000	846,433	5,200	4,160	2,875	12,235	1 9 5
1895	4,000,000	3,876,605	25,000	20,000	10,721	55,721	1 7 10
1898	1,500,000	1,506,269	9,375	7,500	4,441	21,316	1 8 5

REDEMPTIONS AND SINKING FUNDS.

Loans are either redeemed or renewed. In the former c
amount of the obligations of the State to its public creditors is r
in the latter case the liability remains the same. Repayments, h
are chiefly effected under the head of renewals. The followin
ment gives the particulars to 30th June, 1898, of each loan fo
redemption is provided by sinking fund or annual drawings.

›en that a very small part of the outstanding loans is subject to nption in this manner :—

Loan.	Amount of Issue.	Annual Sinking Fund.	Accumulated Sinking Fund.	Amount outstanding on 30 June, 1898.
	£	£	£	£
'ay Loan (53 Vic. No. 24)	1,000,000	75,000	....	475,000
ıry Bills in aid of Revenue—				
'irst Issue (1889–1890).....	2,502,884	150,000	....	1,302,884
iecond Issue (1896)	1,174,700			1,024,700
N. 1924 Stock	198,065	6,602	19,806	178,259
1925 ,, ...	222,255	7,409	22,226	200,029
1927 ,, ...	208,123	6,937	6,937	201,196
astle Water Supply	16,000	....	3,788	12,212

› redeem the Railway Loan (53 Vic. No. 24), it is provided that ıg each year £75,000 shall be set apart for the reduction of the loan. he 30th June, 1896, the fund amounted to £375,000, which was used ›y off debentures in accordance with the Act, while in 1897-8 the ınt accumulated to 30th June, 1898, £150,000, was applied in redemp of the balance of Railway Loan, 31 Vic. No. 11. The principle of ıguishing the public debt by the operation of sinking funds has never l much favour with the Treasurers of the colony. There is, how- a disposition to apply the system to all cases where the work carried y borrowed money is not of a permanent character, or is for the relief e ordinary revenue. In the Loan Fund Act of 1894 provision was ›fore made for an annual sinking fund to redeem a proportion of the proposed to be raised, and a similar provision was made in the Loan of 1895, 1896, and 1897. In connection with the loan of £16,000 ı over by the Government in 1893 from the Municipal Council of castle, a sum of £3,788 had accumulated for the purpose of ›ming the debentures, but no further contributions have been made e Fund. It may be mentioned that the system of establishing ng funds is not favourably entertained in the other colonies, judg- rom the way in which it has been practically abandoned.

QUOTATIONS FOR STOCK.

e standard of the colony's credit can be gauged either from the s obtained by original investors in loans, or from the prices quoted e market for New South Wales representative stock. The ordinary transactions on the London Exchange are perhaps a better guide. ıless the market quotations are disturbed by the issue of a loan by South Wales itself, or by any other colony of the Australasian ›, the standard of credit can be established daily, and consequently › date.

The following table shows the monthly quotations during 1897-8 o the London market for the £16,500,000 3½ per cent. inscribed sto maturing October, 1924:—

Date.		Average of Buying and Selling Price.		Annual Rate per £100 sterling yielded to investors if stock is held till date of maturity.
Month.	Day.	"Cum—Dividend."	"Ex—Dividend."	
1897.				£ s. d.
July	3rd	109	108·11	3 2 11
August	7th	110½	109·27	3 1 10¼
September	4th	109½	108·00	3 2 11¾
October	2nd	110½	110·49	3 0 9
November	6th	109½	109·15	3 1 11
December	4th	109½	108·89	3 2 1¼
1898.				
January	1st	110	109·12	3 1 11
February	5th	110	108·78	3 2 2¼
March	5th	107	105·51	3 5 2¼
April	2nd	105	104·99	3 5 8¼
May	7th	106	105·65	3 5 6¼
June	4th	109	108·39	3 2 6

It will be noticed that despite fluctuations in the colony's sto during the twelve months, at the close of the financial year they we quoted at a slightly higher figure than at the opening. On the 3rd Jul 1897, stocks were quoted at a premium of £8 2s. 2d. against a premiu of £8 7s. 9d. in June, 1898.

Transactions in Government securities on the Sydney Stock Exchan are almost entirely confined to the new funded stock, issued und Act 56 Vic. No. 1. Quotations for debentures and old funded sto are rare. The prices of the new funded stock due 1912 for each mon of 1897-8 will be found in the following table:—

Date.		Buying Price.		Annual rate per £100 sterling yielded to investors if stock is held till date of maturity.
Month.	Day.	"Cum Dividend."	"Ex Dividend."	
1897.				£ s. d.
July	22nd	113	111·22	3 4 5½
August	19th	113	112·90	3 2 0¾
September	16th	112½	112·09	3 3 1½
October	14th	110¼	109·54	3 6 7¼
November	18th	109½	108·40	3 8 1¾
December	16th	109½	108·10	3 8 6½
1898.				
January	20th	109¼	107·46	3 9 5
February	17th	108½	108·50	3 7 10¼
March	17th	109½	109·12	3 6 10¾
April	21st	109¾	108·98	3 7 0¼
May	19th	109	108·04	3 8 4
June	16th	110¼	108·87	3 7 0¾

The following table shows the amounts of stock registered in the lonies and in London. The amount available on the Sydney market only £3,685,227, and of this sum £536,250 represents debentures, d £126,941 old funded stock, which, as already mentioned, are not oted regularly:—

Class of Stock.	Amount Registered in—				Annual Interest payable in		
	New South Wales		Victoria.	London.	New South Wales.	Victoria.	London.
	Purchased from Trust Funds held by Treasury.	Taken up in Open Market.					
	£	£	£	£	£	£	£
benture Bonds	234,100	536,250	61,800	9,657,000	24,206	3,090	414,917
S.W. 4 per Cents. (Old Funded Stock)	403,249	126,941	....	......	21,208	....	....
S.W. Funded Stock—							
56 Vic. No. 1	1,147,260	1,402,090	....	......	101,974	....	....
58 Vic. No. 14	30,000	833,947	....	......	25,918	....	....
59 Vic. No. 6	880,000	452,665	....	......	39,980	....	....
60 Vic. No. 32	... ..	83,014	...	......	2,490	....	....
N.S.W. 1924 Stock	20,000	178,065	....	. ....	5,942	....	....
N.S.W. 1925 Stock	150,000	72,255	....	......	6,668	....	....
scribed Stock	......	......	....	44,512,500	....	....	1,578,869
easury Bills—							
53 Vic. No. 9	1,302,884	......	....	......	42,971	....	....
55 Vic. No. 7	.. ...	......	....	*4,000	......	....	....
59 Vic. No. 22	1,024,700	......	....	......	30,741	....	....
blic Debt on 30th June, 1898	5,192,193	3,685,227	61,800	54,173,500	302,098	3,090	1,993,786

* Overdue.

The owners of debentures are not known, as the bonds are transferable y delivery; the locality of holders, however, can be established by the egistration of the numbers of the interest coupons at the respective gencies.

CHARACTER OF STOCK ISSUED.

As will be seen on page 952, loans have been raised by Treasury bills, ebentures, and stock. The Treasury bills are of a temporary character, nd will in the course of a few years disappear from the statement of the ublic debt, either by substitution of ordinary stock in lieu of them when e temporary purpose for which they were issued has been served, or by edemption on maturity. The practice of issuing Treasury bills, either n anticipation of, or to make good, deficiencies in revenue, is an old-stablished one; but, as will be seen later on, they have been made o serve another purpose, and money has been raised by their sale to eet certain obligations for public works. This is an innovation which ould not be well avoided in the disturbed markets of the last few years. he Treasury bills are like the British Treasury bills in name only, but

The issue of funded stock, which may be more appr registered stock, is regulated by four Acts—one passed 1892, one in 1894 and the other in 1895. Stock is former Act is interminable, while that issued under t Acts may be redeemed at the option of the Governmen tion of twenty years from the date on which the Act the Treasurer giving twelve months' notice of his inten

Under the Act of 1873 the Government was authoris local loan a sum of £509,780, the stock to be know South Wales 4 per cents." The amount of stock sold i this sum was £530,189, which, together with £2,70 another Act, represents the total amount of the intern the colony.

The Funded Stock Act of 1892 authorised the issue amount of £3,000,000. The rate of interest was fixed at a minimum price of par, while the purchasers we privilege of purchasing amounts as low as £10, or a that figure. The amount sold to 30th June, 1898, w leaving stock to the amount of £450,650 yet to be raise

The Loan Acts 58 Vic. No. 14, 59 Vic. No. 6, and 6 passed in 1894, 1895, and 1896 respectively, provided fo ment of other local stocks. The stocks under the first are known as New South Wales 1924 Stock, and Fun latter running *pari passu* with the Stock floated under the amounts outstanding on 30th June, 1898, being £863,947 respectively; the stocks under the 1895 Act New South Wales 1925 Stock and Funded Stock, the lat to the same conditions as that floated under 56 Vi amounts outstanding on the 30th June, 1898, were £1,332,665 respectively. The stocks under the 1896 Ac New South Wales 1927 Stock and Funded Stock, and

ming into force shortly after the negotiation of the £2,000,000
ture loan of 1882, the holders of the scrip had the option of
nging the bonds for inscribed stock, a privilege which was availed
the extent of £1,186,300. The total amount of inscribed stock
to the 30th June, 1898, was £43,032,000, and the amount of
ebenture bonds converted into the new scrip to that date was
0,500, making a total of £44,512,500 inscribed.

Colonial Stock Act was passed by the Imperial Government in
and provides for the inscription and transfer of stock raised in
nited Kingdom, and for stamp duty to be levied thereon. It
efines the position of the British Government as regards Colonial
tedness, and provides that every document connected with stock
ctions shall have printed upon it a distinct intimation that no
ty direct or indirect is incurred by the British Government in
t to such stock, unless the loan is under Imperial guarantee.

Issue of Treasury Bills.

Treasury bills current, as previously mentioned, include those raised
t accumulated deficiencies in revenue, and those issued for loan
s. The first portion of the former were issued during 1889 and 1890
authority of an Act passed in the former year, the amount of the
eing £2,502,884. The Bills were not issued to the public, as the
ry had large sums belonging to various trusts awaiting investment.
mount of this deficiency loan outstanding at the middle of 1898
1,302,884. The second issue of deficiency bills took place in
the total amount being £1,174,700, this sum however was found
£150,000 in excess of that required and consequently bills to
alue were cancelled during 1896–7. The bills were taken up by
easury as in the former case, and the same arrangements for the
tion of the amount have been made. The other class of Treasury
ere issued for the purpose of raising funds which, under other cir-
nces, would have been obtained by ordinary loan. As late as 1890
outh Wales could borrow in London on very favourable terms ;
reaction was setting in, and in 1892, when it became necessary to
, the conditions were most unfavourable. The colony was
y unprepared for the changed circumstances, as it was committed
gements for the construction of public works, and contracts had
ccepted on the assumption that funds would be available. To
er the difficulty, the Government, during the years 1892-3, issued
ry bills to the amount of £4,000,000, under the authority of the
5 Vic. No. 7, passed in December, 1891, and £3,250,000 were
on the market, through the medium of the London and West-
r Bank, and the balance, £750,000, taken up by the Savings Bank
r South Wales.

The following table gives the particulars of the various is Treasury bills, all of which, with the exception of the amounts at 4½ per cent., were negotiated in London :—

Date. When Floated.	Date. When Payable.	Class of Security.	Nominal Rate of Interest per cent.	Amount of Principal	Net proceeds after expenses and accrued interest have been met.	Rate per £1 Paid to Government, allowing for redemption at par on maturity
				£	£	£ s. d.
1890	..	Treasury Bills (in aid of revenue)..	3	1,907,100	1,907,100	3 0 0
1891	..	do do ..	3	505,784	505,784	3 0 0
1895	..	do do ..	3	1,174,700	1,174,700	3 0 0
1892	1894	Treasury Bills (for loan services)..	4	1,250,000	[illegible]	4 9 2¼
1892	1896	do do ..	4	1,000,000	998,750	4 1 5¼
1892	1896	do do ..	4	263,500	262,510	4 2 9½
1892	1896	do do ..	4½	750,000	750,000	4 5 0
1893	1896	do do ..	4	10,800	10,759	4 3 5¼
1893	1896	do do ..	4	725,700	721,050	4 5 3¼

The 1890 and 1891 issues were originally placed at 4 per cent., the money representing their purchase was entirely at the disp the Treasury, being trust funds, the interest on all but £388,5 reduced to 3 per cent. from 1st January, 1895. The amount at cent. was a loan by the Savings Bank of New South Wales.

ISSUE OF LOANS.

Since 1891 four loans, forming part of the Funded Debt, hav placed in London, and with the exception of the last the great of the proceeds was required for redemption purposes. In O 1893, a loan of £2,500,000, bearing interest at 4 per cent., at a mum of 98½, was issued in London. The average price realis £100 11s. 10½d. The total amount subscribed was £6,465,0 the gross proceeds amounted to £2,514,861. The actual inter by the Government, after allowing for charges, and redemption on maturity, is £4 3s. 0¼d. per £100.

In September, 1894, a loan of £832,000 was floated for the p of renewing two small loans maturing on the 1st January, 1895 minimum was fixed at par, and the loan was subscribed over 5 The actual rate per £100 sterling payable by the Government allowing for charges and redemption at par on maturity, is £3 10 while the rate yielded to investors, also allowing for redemption is £3 9s. 4¼d.

In October, 1895, a loan of £4,000,000 at 3 per cent. was flo London, of which no less than £3,352,400 were required for rede purposes. The minimum price fixed was 94, and the average r was £96 18s. 3½d. The actual rate paid by the Government per is £3 4s. 3½d. while the yield to the investors is £3 3s. 2¼d. T loan raised in London was the £1,500,000 3 per cent., flo January, 1898. The minimum price fixed was 99, and the a realised was £100 8s. 4d. The actual rate paid by the Govern- per £100 is £3 1s. 6d., while the yield to investors is £3 0s. 4½d. e Funded Stock Acts were passed in 1892, 1894, and 1895 respec- y. The first sales under the 1892 Act were effected on the 8th ember, 1892, and from that date to the 31st December of the same stock to the amount of £227,000 was disposed of. On the 30th , 1897, the total amount sold under this Act was £2,549,350, e the amount sold under the 1894 Act to the same date was 3,947, and under the 1895 Act £520,458. The cost of the issues practically nil, except the ¼ per cent. paid for brokerage, and even was only payable in respect of a portion of the issue, the bulk of stock being taken direct from the Treasury. During 1894, 1895, and 5 small parcels were sold by the Government at a slight premium. ne following table shows the cost to the Government and the yield vestors per £100 sterling on each of the issues from 1881 to 1898: –

Date.		Nominal Rate of Interest per cent.	Amount of Principal.	Net Proceeds after Expenses and Accrued Interest have been met.	Rate per £100 sterling.					
					Paid by Government, allowing for redemption at par on maturity.			Yielded to original investors if stock is held till date of maturity.		
en ted.	When Payable.		£	£	£	s.	d.	£	s.	d.
81	1910	4	* 2,050,000	2,095,973	3	18	6¼	3	17	11½
82	1933	4	* 2,000,000	2,012,154	4	0	2½	3	19	9½
83	1933	4	† 3,000,000	2,935,909	4	2	8¼	4	1	9¼
83	1933	4	† 3,000,000	2,958,831	4	2	0	4	1	1
84	1924	3½	† 5,500,000	5,024,458	3	18	4½	3	17	0½
85	1924	3½	† 5,000,000	4,921,878	4	0	3	3	18	11
86	1924	3½	† 5,500,000	5,074,026	3	17	7½	3	16	3¾
88	1918	3½	† 3,500,000	3,543,177	3	9	5¼	3	8	2
89	1918	3½	† 3,500,000	3,498,020	3	10	8	3	9	4
91	1918	3½	† 4,500,000	4,186,144	3	18	0	3	16	5½
91	1918	3½	† 494,200	459,732	3	18	0	3	16	5½
93	1933	4	† 2,500,000	2,440,549	4	3	0¼	4	1	8½
94	1918	3½	† 832,000	829,551	3	10	11	3	9	4¼
95	1935	3	† 4,000,000	3,804,573	3	4	3½	3	3	2¼
98	1935	3	† 1,500,000	1,479,746	3	1	6	3	0	4½
5–6	1924	3	† 20,000	20,000	3	0	0	3	0	0
5–6	1925	3	† 50,000	50,000	3	0	0	3	0	0
6–7	1924	3	† 178,065	177,651	3	0	8	3	0	0
6–7	1925	3	† 172,255	172,135	3	0	6	3	0	0
92	1912	4	‡ 227,000	226,596	4	1	0¼	4	0	0
93		4	‡ 1,829,400	1,827,850	4	0	11	4	0	0
94		4	‡ 307,430	313,410	3	18	2	3	18	2
95		4	‡ 130,750	133,293	3	18	0½	3	18	0½
5–6		3	‡ 180,000	180,000	3	0	0	3	0	0
6–7		4	‡ 54,770	56,143	3	17	1	3	17	1
6–7		3	‡ 863,947	862,776	3	0	8	3	0	0
6–7		3	‡ 340,458	340,458	3	0	0	3	0	0
7–8		3	‡ 812,207	811,982	3	0	5¾	3	0	0
7–8		3	‡ 83,015	82,815	3	0	9¾	3	0	0

* Debentures. † Inscribed stock. ‡ Funded stock.

When the necessities of the Treasurer compelled him to borr
to obtain funds to complete urgent public works, he was forced t
a net price of 93, or £8 lower than the loan of 1888. In 18
ever, as previously mentioned, a 4 per cent. loan was floated at a
of £100 11s. 10½d., the actual rate paid by the Governm
allowing for redemption at par being £4 2s. 4d. ; while in 1
average price realised for the £832,000 3½ per cent. conversion
£101 14s. 8d., and the rate paid by the Government £3 10s. 3½
was about that given for the 1889 loan. The 3 per cent. loa
in 1898, however, was by far the most successful, and the rate
the Government and yielded to the investor are even lower th
of the 1888 and 1895 loans, which were the most satisfactor
1898 loan was placed.

In the foregoing pages much has been said of the indebtedne
colony. It would, therefore, be only fair to say somethin
resources on which the colony may rely as security for th
creditors, but before examining the nature of these resources i
well to recapitulate the liabilities outstanding. These are as f

Public Debt, including Treasury Bills for loan services...	£60,785,
Treasury Bills in aid of Revenue	2,327,
Uninvested Trust Funds	3,392,
Total............	£66,505,

No allowance has been made in the foregoing figures for ba
credit of either loans or trust accounts, as money to the cred
General Loan Account is allotted, and awaits expenditure o
services, whilst the Trust Funds are liabilities whether repre
securities or cash. The interest payable on the sum of £66
outstanding amounts to £2,386,394. The assets of the Gover
the colony are the public works, elsewhere described in thi
which yield an income of £1,673,000 after all charges of mai
and working have been defrayed: and the public lands,
124,184,000 acres are leased for pastoral or mining purp
20,240,000 acres sold on deferred payments, the balance due i
of which amounts to £11,624,000, bearing interest at the rate
5 per cent. From the public estate there is obtained an annual
of about £1,240,000, or allowing £150,000 for administrati
revenue of £1,090,000, so that the colony has a revenue of £2
or £376,606 in excess of the whole charge for the public debt,
having to resort to taxation of any kind, and without parting
more of the public lands. This fact alone ought to be eviden
such were wanted, of the ability of New South Wales to
engagements with the public creditors; but this is a point
little need be said, for the security enjoyed by those who
debentures of the colony lies more in the wealth and integri
people than in the actual possessions of the Government.

PRIVATE FINANCE.

previous editions of this work an estimate was given of the value of private property as in March, 1893, showing a total of ,187,000, or £336 per head. Since the date named there has been eral decline in values, and as no great increase of population has place to counterbalance the fall in the average value of property ead, the total for the whole colony is now below the figures for . A very careful estimate has been made of the value of property e close of 1898. The details of this estimate are as follow :—

	£
Land (unimproved value)	147,818,000
Houses and permanent improvements	117,709,000
Live stock	30,668,000
Personal property, household furniture, and effects.	15,193,000
Machinery and implements of trade	9,804,000
Merchandise	16,537,000
Shipping	1,384,000
Mining properties and plant	9,600,000
Coin and bullion	8,477,000
Miscellaneous movable property not included in the foregoing	1,676,000

sides the property falling under one or other of the descriptions in oregoing list, there are other descriptions which must be considered valuation of this kind. These comprise chiefly shares and other ests in public companies and undertakings, the value of which is not sented by capital invested in land, buildings, machinery, etc. The of gas companies may be cited as illustrating what is meant. The total value of the shares of, and interests in, these compa £2,250,000; but in the statement of values of properties given the actual property of gas companies appears as—value of mac etc., £632,000; land, &c., £550,000; in all, £1,182,000, or £1,0 below the actual selling value of the gas undertakings of the c Various allowances of this kind reach a total of £19,250,000, a sum, added to £358,866,000 already arrived at, makes a total v £378,116,000. An indirect method of estimating the value of property is afforded by comparing the amount of property l persons dying as disclosed by the returns for stamp duty. To us returns to full advantage, they must be read in connection wi ages of the persons leaving estates, and the number of persons age amongst the general population. At present it is not possibl this, and in the absence of the requisite information the averag of estates left by adults who died may be taken as approxi representing the average value of the estates of those who survi

During the five years 1894–98, there were 9,497 persons who died l property, the value of such property being £19,510,000, or £ for each separate estate. The adult population at the middle of numbered 669,600, and of these, as will be subsequently shown, cent.—that is to say, 180,800 persons—were the possessors of pro Assuming the average value of estates to be £2,054, then the value of all property would be £371,363,200. The detailed es gives £378,116,000; but from this there must be deducted £11,5 due to the Crown by the holders of conditional selections und various Lands Acts, so that, the actual sum for purposes of comp would be £366,616,000. The results arrived at by such totally di methods are so close as to warrant confidence in the calculatio which they are founded. In round numbers, the value of prope New South Wales may be set down at 370 millions sterling.

The most interesting item of the estimate is that in regard t The figure given is £147,818,000. Deducting £11,500,000, repres balances due to the Crown by holders of conditional purchases, is a net value of £136,318,000. The returns made under th visions of the land tax show a total of about £115,000,00 there is every reason to suppose that the valuations for purpose o tion fall, on the whole, short of true values by more than 15 per which would show that the present estimate is fairly exact.

The distribution of property is a matter of even more interes its total valuation, and the probate returns afford an excellent t indirect method of arriving at an estimate of the number of p possessing property, and the extent of their holdings. The fol table gives the number of wills proved, and letters of administ granted from 1865 to 1897. It also gives the number of estates pared with every hundred deaths of the whole population, of males and females, and of adult males. The table must be take the qualification that during 1875 stamp duties were abolishe

not reimposed until 1881. For all years embraced within this
d the returns are incomplete as regards the amount sworn to:—

eriod.	Proportion of estates per 100 deaths of adult males.	Proportion of estates per 100 deaths of adults (males and females).	Proportion of estates per 100 deaths of total population.	Number of estates
65–69	18·9	12·7	5·7	2,079
70–74	22·7	15·0	7·5	2,747
75–79	30·9	20·2	9·4	4,973
80–84	34·6	22·3	11·0	6,825
85–89	37·5	23·8	11·6	8,440
90–94	41·2	25·8	13·2	10,027
95–97	44·2	27·3	15·2	6,852

ne figures just given clearly point to the fact that year by year
erty is becoming more widely distributed, and this conclusion is
e out by figures which appear in other parts of this volume. In
period covered by the table, which may be taken as approximately
ty years, the proportion of persons holding property has nearly
led: for whereas in 1865-69 not quite six persons out of a
red held property, the proportionate number in 1895-97 was
en, and this increase in distribution was accompanied by an
ase of over 50 per cent. in the value of the individual estates – a
rkable condition of progress, the equal of which it would be vain
ok for in other countries.

n some previous editions of this work it was assumed that few women
property worth taking into consideration in estimates founded on
probate returns. Researches since made show this assumption to
uite erroneous, and so far from property being almost exclusively
ined to men, women have estates amounting in the aggregate to no
nsiderable value. From the available returns it appears that out of
y hundred estates paying stamp duty, twenty-one are left by women,
n other words, the number of women's estates paying duty is nearly
er cent. of the number of estates belonging to men a proportion
gether too large to be neglected.

n the chapter of this volume dealing with employment, it is pointed
that at the time of the census there was an unemployed population
lult breadwinners equal to 4·8 per cent. of their whole number, and
notorious that the number has increased since the date mentioned.
is obvious that an increasing ratio of wealth accumulation
an increasing distribution are consistent with a dearth of employ-
t amongst a certain class of the community. It is a sound senti-
t that a condition of regular employment of the whole population
ng to work is more conducive to real prosperity than a condition
h, while affording increased opportunities of saving to a large pro-
ion of the community, leaves a not inconsiderable section uncertain

as to their means of support during a large part of the year. Tl dition of affairs to which allusion has been made is one of the sistencies of modern progress by no means peculiar to Australia, remedy it is perhaps the chief aim of modern social legislation.

In the absence of the exact figures which it may be possible future to obtain under the present system of direct taxation, the distribution of wealth in New South Wales is a matter on which o may differ; but the collections under the Stamp Duties Act affo which indicate the distribution with more or less accuracy. The ing are the returns for eight years and a half:—

Year	Under the value of £5,000.		£5,000 and under the value of £12,500.		£12,500 and under the value of £25,000.		£25,000 and under the value of £50,000.		£50,000 and over.		To
	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.
		£		£		£		£		£	
1890	1,644	1,281,598	61	472,820	35	654,055	11	412,320	17	3,629,635	1,768
1891	1,836	1,254,330	74	604,390	28	512,425	16	506,580	6	717,770	1,960
1892	1,990	1,330,502	76	596,480	20	381,860	19	720,320	14	1,458,145	2,119
1893	1,795	1,215,445	68	533,455	24	381,960	11	394,145	8	1,254,735	1,906
1894	1,912	1,351,750	68	540,490	29	494,815	15	503,890	7	1,171,005	2,031
*1895	903	556,375	31	235,075	13	246,855	8	277,875	6	564,955	961
1895–6	2,076	1,311,800	54	434,030	22	376,065	12	429,175	16	1,726,939	2,180
1896–7	1,959	1,150,785	57	463,028	24	439,245	17	588,925	15	1,724,425	2,072
1897–8	2,143	1,304,790	72	618,310	22	344,635	6	217,260	10	2,338,475	2,253
Total	16,258	10,877,372	561	4,498,138	217	3,831,915	115	4,110,520	99	14,656,054	17,250

* Half-year ended 30th June.

If the adult population at the middle of 1898 numbered 6 and of these 27 per cent.—that is to say, about 180,800 persons the possessors of property, and assuming further that the £370,000,000, which is the present valuation of the wealth of the was distributed amongst the 180,800 persons in the same pro as the £38,003,999 ascertained in the table just given was distr amongst the 17,250 persons in whose estates stamp duties were then the following would be the present distribution of prop New South Wales:—

Class of Estates.	Persons with estates.	Total value of estates of each class.	
	No.	£	per
Under £250	72,762	6,465,000	
£250 and under £5,000	97,641	99,355,000	2
£5,000 and under £12,500	5,880	43,660,000	1
£12,500 and under £25,000	2,274	37,370,000	1
£25,000 and under £50,000	1,265	39,960,000	1
£50,000 and over	1,038	143,190,000	3
Total	180,800	370,000,000	10

These figures show that nearly one half of the property of the colony is in the hands of 2,243, nearly three-fifths in the hands of 4,517, and almost three-fourths in the hands of 10,397 persons.

According to the proportions already ascertained, the possessors of property would comprise 142,832 males and 37,968 females; and those who have no property, or so little as not to be worth while making it the subject of formal bequest, 488,800 adults, viz., 240,370 males and 248,430 females. These and certain other figures given on the previous pages of this chapter are advanced with no little diffidence, because all deductions based on the probate returns, and not taking into consideration the ages of the persons leaving property, are open to error. Further researches now in progress may or may not support the figures, but it can be said that, so far as investigations have proceeded, nothing has been disclosed that would tend to discredit their substantial accuracy.

In the Statistical Abstract of the United Kingdom the number of estates on which probate duty was paid for the six years 1888–89 to 1893–94 is stated at 302,055. Making the liberal allowance of one-fourth for successions, of which the number is not given, the percentage of persons owning property would be about 8·8, as against 15·2 in New South Wales.

INCOMES.

The following estimates of the income derived from New South Wales, or enjoyed by persons residing in the colony for the year 1898, are based upon the statistics of incomes subject to taxation supplied by the taxation department, and upon the direct statements of pastoralists, manufacturers, and other employers of labour. The total income amounted to £64,426,000, and of this sum £59,899,000 was drawn in the colony, and £4,527,000 by absentees. Dividing the incomes into classes, the following were the sums received by residents:—

	£
Employers and property owners	19,505,000
Professional persons and persons working on own account	8,176,000
Wage-earners	29,679,000
Public servants, excluding railway employees and roads maintenance men, included with wage-earners	2,539,000
Total	£59,899,000
Absentee incomes, £2,530,000, and payments to debenture holders, £1,997,000	4,527,000
	£64,426,000

The earnings of employers and of capital employed in New South Wales are placed at £19,505,000. This sum, however, represents not merely the income of the employing class, but also of companies carrying on co-operative enterprises, depositors in financial institution, income derived from invested capital, no matter how small the amount. It unfortunately happens that there are no data on could be founded an estimate of the amount of income deri persons superintending the employment of their own capital as guished from capital indirectly employed.

There are about 490 companies whose incomes exceed £200 a and their aggregate earnings amount to £2,250,000. Further det the larger incomes are given below.

With wage-earners are included persons assisting relatives. persons are usually remunerated indirectly, with, in some instances addition of a small money wage. The total income of wage-earner £29,679,000, distributed amongst 300,000 males, receiving £26,9 and 75,000 females with £2,755,000. These figures give an average a little less than £90 per male, and £37 per female, wage-earner twelve months.

The earnings of females amounted to at least £4,338,000; but the income was probably considerably more, seeing that the income of fe capitalists and land-owners could not be ascertained, and is in addi to the sum just set down. The wage-earning females had an inco as already stated, of £37, but to this sum should be added the appro mate value of board which servants receive. Women working on th own account, who numbered 16,995, had an income of £1,178,000, wh those who were employers of others, had incomes amounting to £403,0

Dividing the incomes into two classes, those over and under £2 year, it has been found that the amount falling into the first cla £17,595,000, and into the second £44,834,000; but these sums do include £1,997,000 paid to debenture holders in England, partic concerning which were not ascertained. The incomes over £200 w enjoyed by 30,732 persons and 490 companies, and their approxi distribution was as follows:—

£		£	
200	and under	250	10,644
250	,,	300	5,961
300	,,	400	5,657
400	,,	500	2,571
500	,,	700	2,553
700	,,	1,000	1,574
1,000	,,	1,200	577
1,200	,,	2,000	813
2,000	,,	5,000	620
5,000	,,	10,000	169
10,000	,,	20,000	45
20,000	and upwards		38
Total incomes over £200			31,222

29,275 unemployed, the number of persons following gainful enjoying income from property, is 534,315, and of these adults. It may, therefore, be concluded that 30,732 adults s above £200 a year, and 407,158 below that sum.

subdivision may be made, according to the sources whence are derived; but this subdivision can be extended only to xcess of £200 a year, and is as follows :—

	No.	£
s, traders, &c.	4,989	2,480,000
s	490	2,250,000
s other than public servants	4,166	1,444,000
rvants	3,211	999,000
	1,042	357,000
nal persons	1,750	873,000
uctioneers, brokers, &c.	1,232	740,000
turers (part)	289	193,000
eous, including some manufacturers	355	847,000
l investments	13,698	7,412,000
Total	31,222	£17,595,000

me of £59,899,000 disclosed in the foregoing tables cannot upon as entirely within the disposition of the persons to crues. The actual cost of living during the year 1897 is ge 1053 as £52,263,900, and for 1898, perhaps £720,000 ded. In addition to this expenditure, £541,000 was paid cal rates; payments to the State out of income by holders nditionally purchased amounted to £1,110,000; and life premiums, £910,000. There were, of course, losses by fire, nd the like, and maintenance and repair of properties, which luced the spendable income. The income of absentees,), was expended abroad, but this amount has not been the £59,899,000 quoted above. When every allowance nade, it will be found that in spite of the serious checks to sperienced during the year, the savings of the community e very respectable sum of £4,000,000, in addition to the cumulations represented by life assurance premiums and o the State for land conditionally purchased.

IMPORTATION OF CAPITAL.

as been freely poured into New South Wales, especially by estors. During the twenty-seven years from 1871 to 1897, f £102,346,000 was invested in the colony. Of this large 185,000, or nearly one-half, represented the proceeds of loans

obtained by the Government and local government bodies ; £7,7
the amount of capital introduced by persons who came to the
and made it their home ; and £46,365,000, the amount of other
sent for investment. Under the third category are included inves
of persons living abroad, the money introduced by banks and
companies, and the lendings of private persons. The total sur
tioned, viz., £102,346,000, did not, it should be understood,
reach the colony, since there were large counter payments to b
on account of the earnings of capital already in the colony, a
income drawn by absentees. Including capital withdrawn from
ment, the total of the payments made during the twenty-seven
referred to may be set down at £99,885,000 ; so that the actual
imported was £2,461,000.

The importation of capital by the Government has already bee
with at length in the portion of this volume dealing with loan
detailed reference thereto is not needed here. The import of cap
persons who have taken up their residence in the colony has av
nearly £300,000 a year, and has been a material element i
progress of the colony, as it has not entailed the export of inte
the repayment of the principal. The capital invested by perso
living in the colony amounted to £46,365,000, including money
English banks, and representing their capital, with the deposits re
in Great Britain and employed in the colony ; capital employed by
investment companies ; mining capital ; and miscellaneous investm
including advances on mortgages and investments in real estate i
city of Sydney. Against this, there was, of course, a withdraw
money from investment during the period.

The following are the particulars of the investments referred to a
grouped in periods of five years, except the last period, which em
seven years :—

Classification.	1871-75.	1876-80.	1881-85.	1886-90.	1891-97.
	£	£	£	£	£
Capital imported by the Government and local bodies................	2,861,000	5,458,000	16,066,000	11,571,000	12,229,000
Capital introduced by persons taking up their residence in the colony	751,000	1,983,000	2,719,000	1,387,000	956,000
Capital invested in the colony by persons living abroad	2,038,000	8,597,000	13,791,000	15,187,000	6,752,000
Total capital introduced	5,650,000	16,038,000	32,576,000	28,145,000	19,937,000

gures just given do not cover the entire case. British money loyed in the colony prior to 1871, but not to any large extent, no inconsiderable sum was invested in pastoral properties, y in the Riverina district, by persons residing in other colonies, n Victoria. Taking all circumstances into consideration, the introduced for private investment prior to 1871 may be set £16,000,000. The import of money due to the increase in the lebt from 1871 to the end of 1897, has been estimated at ,000; but the actual State and municipal debt owed outside ny was £55,611,000, the excess representing the import of n public account up to 1870. The debt of New South Wales ns outside its boundaries in excess of the value of property the colony owned by New South Wales residents is as set low. It will be noticed that private indebtedness is stated at ,000; this is the net sum remaining after making allowance capital withdrawn from the colony by investors during the om 1871 to 1897 :—

	Amount.	Income
blic creditors	£54,235,000	£1,997,000
unicipal creditors	1,376,000	59,000
rivate creditors and absentees	49,273,000	2,471,000
Total	£104,884,000	£4,527,000

m required to meet the interest on investments in New South iz., £4,527,000, is undoubtedly very large, representing as it 8s. 5d. per head of population. A considerable portion of this not a burthen on the community, being the result of antecedent n. Thus the mining industry alone pays £900,000 as profits nses on New South Wales mines owned out of the colony; but come would cease if the mines failed to be productive, this stands in a different category to the interest on the public debt, ple. Other payments, standing on much the same footing as the of mines, amount to about £1,150,000, leaving the payments de to the creditors of the colony, irrespective of production, ately £2,477,000.

ures in regard to importation of capital have not been carried a later date than the end of 1897. Some slight importations l undoubtedly took place in 1898, but it is too soon to attempt sis of the figures by which this importation is disclosed.

CURRENCY.

The coins circulating in Australasia are those of the United Kin
Gold is the standard; the silver and copper current are more pro
tokens than coins. Gold coins are legal tender to any amount; silv
an amount not exceeding forty shillings; and bronze for one shi
The standard weight and fineness of each coin are given below.
least current weight of a sovereign is 122·5 Imperial grains, and
half-sovereign 61·125 grains :—

Denomination of Coin.		Standard Weight.	Standard Fineness.
		Imperial grains.	
Gold	Sovereign..................	123·27447	Eleven-twelfths fine go decimal fineness 0·9 one-twelfth copper al
	Half-sovereign..........	61·63723	
Silver	Crown	436·36363	Thirty-seven-fortieths silver, or decimal fin 0·925, and three-fort copper alloy.
	Double Florin...........	349·09090	
	Half-crown	218·18181	
	Florin	174·54545	
	Shilling....................	87·27272	
	Sixpence..................	43·63636	
	Threepence	21·81818	
Bronze......	Penny	145·83333	Mixed metal, 95 parts co 4 parts tin, and 1 part (The Coinage Act does no scribe these proportion bronze coins, but the allo is as stated.)
	Halfpenny	87·50000	
	Farthing	43·75000	

Gold coins only are struck at the Sydney Mint, though silve
bronze of English coinage are issued. Towards the close of
however, the Governments of New South Wales and Victoria succ
in inducing the Imperial authorities to grant them permission t
silver and bronze for circulation in the Australian colonies, a
retain the profits of the coinage.

Standard or sovereign gold has a fineness of 22 carat, and is
£3 17s. 10½d. per ounce; pure gold, or 24 carat, is worth £4 4s
per ounce. The whole of the gold contained in deposits sent t
Sydney Branch of the Royal Mint for melting, assaying, and c
is accounted for at the rate of £3 17s. 10½d. per ounce stand
sovereign gold.

Standard silver is 0·925 fine. Owing partly to its greatly inc
production, and still more to its demonetisation in a large p
Europe, and the restrictions placed upon its free coinage in cou

till have a double standard of coinage, its value has decreased 54 per cent. during the last twenty-five years. The average standard silver in the London market for each year since 1872 in the annual reports of the Deputy Master of the Royal Mint vs :—

Price per standard ounce.	Year.	Price per standard ounce.	Year.	Price per standard ounce.
d.		d.		d.
60¼	1881	51¾	1890	47¾
59¼	1882	51 13/16	1891	45 1/16
58 5/16	1883	50 9/16	1892	39 13/16
56 13/16	1884	50 11/16	1893	35⅝
53	1885	48⅝	1894	29
54¾	1886	45⅜	1895	29⅞
52 9/16	1887	44⅝	1896	30¾
51 3/16	1888	42⅞	1897	27 9/16
52¼	1889	42 11/16		

uctuations in its value during 1897 are shown in the following average monthly prices :—

	Price per standard ounce.	Month.	Price per standard ounce.	Month.	Price per standard ounce.
	d.		d.		d.
....	29¾	May	27 13/16	September ...	25 11/16
... ..	29 11/16	June	27 9/16	October.........	26¾
....	28 15/16	July	27⅜	November.....	26 13/16
......	28⅜	August	25 1/16	December......	26 13/16

ominal value of one pound (avoirdupois) of bronze coined into 4s., and into halfpence or farthings, 3s. 4d.

The weight of gold sent for coinage from the first opening of the
on the 14th May, 1855, to the end of 1897, was 23,433,725 oz.,
at £87,250,533. Of this quantity New South Wales produced
8,706,229 oz., of the value of £32,949,832, the amount from each
being :—

Colony where gold was produced.	Weight.	Value.
	oz.	£
Queensland	10,314,338	36,692,657
New South Wales	8,706,229	32,949,832
New Zealand	2,582,088	10,218,363
Victoria	1,442,690	5,923,511
South Australia	80,222	284,592
Tasmania	12,365	46,605
Other countries	35,188	124,173
Old coin	260,605	1,010,800
Total	23,433,725	87,250,533

The greater part of the gold won in New South Wales and Q
land, and also part of the produce of New Zealand and South Aus
come to Sydney for coinage; but by far the larger portion of th
of the colonies last mentioned, as well as of the other colonies
group, goes to Melbourne, although for the years 1895, 1896, and
a small proportion of the Western Australian gold was sent
Sydney Mint. The total value of gold raised in Australasia to th
of 1897 amounted to £399,381,186, of which £87,250,533, equi
to 21·8 per cent., passed through the Mint of this colony. The
of gold coin and bullion issued up to the end of 1897 was £87,08
of which £83,906,000 worth of gold was converted into coin, the
of sovereigns and half-sovereigns being :—

Year.	Sovereigns.	Half-sovereigns.	Total.
	£	£	£
1855 to 1887	53,848,500	2,388,500	56,237,000
1888	2,187,000	....	2,187,000
1889	3,262,000	32,000	3,294,000
1890	2,808,000	....	2,808,000
1891	2,596,000	77,000	2,673,000
1892	2,837,000	....	2,837,000
1893	2,844,000	125,000	2,969,000
1894	3,067,000	....	3,067,000
1895	2,758,000	....	2,758,000
1896	2,544,000	....	2,544,000
1897	2,532,000	....	2,532,000
Total	81,283,500	2,622,500	83,906,000

Bronze coin was first issued from the Mint in 1868, and silver coin 1879, the respective value of each to the close of the year 1897 ng:—Bronze, £45,440; and silver, £476,600. The amount of each ·ticular currency issued to the end of 1897 is shown in the following ›le:—

Year.	Silver Coin.							Bronze Coin.
	Crowns and Double Florins.	Half-crowns.	Florins.	Shillings.	Six-pences.	Three-pences.	Total.	
	£	£	£	£	£	£	£	£
68 to 1887	585	97,040	73,150	93,800	25,000	37,940	327,515	29,370
1888	215	1,260	850	3,250	3,100	2,610	11,285	1,630
1889	200	7,700	3,900	3,900	2,700	3,975	22,375	1,560
1890	200	7,400	8,500	9,200	4,500	5,375	35,175	1,460
1891	......	2,000	1,800	4,100	5,100	4,200	17,200	1,980
1892	......	1,500	4,000	4,300	2,500	1,625	13,925	2,065
1893	......	2,800	2,300	3,500	1,000	425	10,025	840
1894	......	1,900	1,100	900	1,500	900	6.300	505
1895	100	900	700	250	300	2,500	4,750	1,260
1896	......	2,100	2,300	4,200	1,300	900	10,800	2,880
1897	......	2,000	2,000	4,600	800	7,850	17,250	1.890
Total... £	1,300	126,600	100,600	132,000	47,800	68,300	476,600	45,440

The difference between the nominal value of silver and the average price r standard ounce paid by the London Mint represents the seignorage gross profit. The coinage or nominal value of silver per standard nce is 5s. 6d., and the price per ounce paid by the London Mint during 97 averaged 2s. 3⅞d., the difference—3s. 2⅛d.—representing the ignorage accrued. Against this must be placed the loss to the Imrial Government by purchase of worn silver at its nominal value; t after making all necessary allowances for loss by abrasion, minting, :., a considerable margin of profit remains. As, however, silver coins e merely tokens, the demand for them is necessarily limited, the average nual issue of silver coin by the Sydney Mint for nineteen years being out £25,100. The average price of standard silver from 1879 to 1897 s about 43d. per ounce. If all the silver issued by the Sydney Mint ice 1879 had been coined there, the gross profits for the whole period uld have amounted to about £166,000, but from this would have d to be deducted the loss on old coin withdrawn and the cost of inting.

The gold bullion issued by the Mint is partly pure gold in small quantis for the use of jewellers, chemists, and others; but the bulk consists 10-oz. ingots of sovereign gold, which has, of late years, been princilly exported to India by the Sydney branch of the "Comptoir National Escompte de Paris." The total amount of gold bullion issued during 97 was valued at £130,448, and to the end of 1897 at £3,180,244.

Worn gold coins have been received at the Mint for recoinag
1876, and silver coins since 1873. Light gold coins are rec
parcels of not less than £50 nominal value, and recoined free of
but depositors must bear the loss by abrasion. The nominal
gold coin withdrawn from circulation during 1897 was only £
net loss by recoinage being £12, or 2·457 per cent. For th
period from 1876 to 1897 the corresponding figures were £
£2,719, and 0·33 per cent.

Silver coin of the value of £16,073, and weighing 58,488·10
withdrawn during 1897. On this the net loss, after melting, wa
to be 5,895·82 oz., or 10·09 per cent. The value of silver coin wit
from 1873 to 1897 was £159,990; its weight, 581,780·47 oz.;
net loss, 71,472·04 oz., or 12·29 per cent. All silver coin withd
forwarded to London for recoinage.

The expense of the Sydney branch of the Royal Mint i
by the local Government, £15,000 being set apart annually
purpose. Special votes for construction, repairs, and furnitur
however, been passed occasionally, as will be seen from the su
table, which shows the total cost of administration, as well as
cost to the colony for the last ten years. The falling off in 18
chiefly caused by the diminished profits on the silver account :—

Year. ended 31st December.	Actual Expenditure from Consolidated Revenue.			Mint Receipts (paid into Consolidated Revenue)	Ann (for
	On Ordinary Administration (including Pensions, Stores, and Stationery).	On Construction, Repairs, and Furniture.	Total.		
	£	£	£	£	
1888	13,495	1	13,496	10,906	
1889	13,622	1,922	15,544	12,084	
1890	14,955	120	15,075	13,208	
1891	14,357	417	14,774	13,929	
1892	13,344	283	13,627	11,652	
1893	14,293	555	14,848	13,198	
1894	14,028	5,823	19,851	16,705	
1895	13,937	348	14,285	14,510	
1896	14,277	493	14,770	14,847	
1897	13,866	7,668	21,534	11,702	

* Excess receipts.

The receipts of the Mint, which are paid into the Cons
Revenue, are made up of charges for coining gold, fees for
and profits on sale of silver. The Mint retains all silver cont
deposits, and makes payment for the amount in excess of 2
at a rate which is from time to time notified in the *Gazette*,
from 1st January to 30th September, 1896, was 1s. 9d.,
October, 1896, to 23rd August, 1897, 2s. per oz. fine, and

tioned date, 1s. 6d. per oz. fine. The following table shows e of charges :—

Quantity.	Gold raised in New South Wales.	Gold certified to be the produce of any colony or country other than N. S. Wales.
sits of less than 500 , standard.	6d. per ounce, six shillings being charged for a deposit under 12 ounces.	5d. per ounce, five shillings being charged for a deposit under 12 ounces.
sits of 500 ounces and ut less than 5,000 ounces, rd.	4d. per ounce	3d. per ounce.
sits of 5,000 ounces, rd, and over.	2d. per ounce	1d. per ounce.

otal receipts of the Mint since its establishment in 1855 are elow :—

	Mint Charges.		Profit on Sale of Silver.	Fees for Assays and Crushings, and Proceeds of Sweep.	Total Mint Receipts (paid into Consolidated Revenue).
	On New South Wales Gold.	On Gold of other Colonies or Countries.			
	£	£	£	£	£
887	263,152	131,326	47,398	55,307	497,183
	1,649	3,483	3,678	2,096	10,906
	2,299	4,613	3,434	1,738	12,084
	2,432	4,152	4,772	1,852	13,208
	2,881	3,854	5,319	1,875	13,929
	2,938	3,893	3,164	1,657	11,652
	3,624	3,713	4,290	1,571	13,198
	4,439	3,759	5,402	3,105	16,705
	3,832	3,125	5,058	2,495	14,510
	3,487	2,956	5,058	3,346	14,847
	3,317	3,259	2,962	2,164	11,702
tal	294,050	168,133	90,535	77,206	629,924

mer issues of this work tables were given purporting to show nt of coin in private hands. These tables were given on the of the Mint, and were deduced from the statistics of gold and ported and exported. For 1896 the amounts were :—

Coinage.	Total.	Per Inhabitant.
	£	£ s. d.
Gold	4,536,882	3 9 11
Silver	398,205	0 6 2
Bronze	34,633	0 0 6
Total......	4,969,720	3 16 7

In the report of the Sydney Branch of the Royal Mint for 1 however, the then Deputy-Master drew attention to the fact that i desirable to devise a more accurate method of ascertaining the c private hands, as the previous estimates were not reliable.

It has been contended that passengers by outward steamers us take with them a supply of gold which greatly exceeds the amount br to the colony by passengers inward. This may be conceded, inasmu passengers commencing the voyage would naturally be possessed larger stock of money than those whose voyage is practically over. B in 1892 the general manager of one of the principal banks in Sy obtained returns from the three banking institutions with the la receiving business, and it was found that the coin paid in was equ precisely half the value of the notes deposited at the same time. Fro it has been claimed that the coin in private hands is not more than hal note issue outstanding, which at the time the estimate was made wa more than £1,450,000. On this assumption the coin in private h would have been £725,000, as compared with £4,416,000 estim by the Mint as being the probable quantity at the same pe While not maintaining the absolute accuracy of the latter esti it may be pointed out that there are many sound reasons wh estimate of £725,000 should not be entertained. Bank notes continued in circulation by several of the banks until they are p cally worn out, and a large number of persons not over fasti have strong objections to carrying notes about their persons whe can be procured. The assumption that coin is withdrawn in quantities by outward-bound passengers may be correct so far as g concerned, but not so as regards silver. It is, therefore, probable the silver remains in the country, and the estimate of the Mint in r to that metal may be accepted with some deduction for coin lost o troyed. Another source of the accumulation of coin in private ha hoarding, which recent events prove to be quite a common pr in the colony, and the indestructible and unimpeachable sovere naturally preferred to the perishable bank note. Lastly, a larg portion of the half-sovereigns issued remains in circulation with sil till-money, and not being paid into the banks would not be subject conditions of the estimate of the banking authority already allude

An estimate, founded partly on the records and partly on observ has been made by the author, which shows that the estimate of the must be abandoned as being too high, and the amount of coin in p hands may be approximately stated as follows :—

	£
Gold	1,893,000
Silver	370,000
Bronze	32,000
Total	£2,295,000

ɿual to £1 14s. 8d. per inhabitant at the close of 1897. To the ɾn must be added £1,227,964 note circulation; so that the total rrency would appear to be about £3,523,000, or £2 13s. 3d. per ıt. As, however, the note issue is fully covered by gold in the sian colonies, it is omitted from the following tables, in which, ther hand, the coin held by banks is included for the sake of on. Including bank reserves, the gold and silver held in sia at the end of 1897 amounted to no less than £6 13s. 11d. ıbitant—a sum slightly above that shown for France, and ıbly in excess of that shown for any other European country. res given in the tables are published on the authority of the of the United States Mint, Washington, with the exception of Australasia, which are based on a special estimate. The total money held in various countries in 1897 were as follow:—

untry.	Gold.	Silver.			Uncovered Paper
		Full Tender.	Limited Tender.	Total.	
	£	£	£	£	£
rdom	120,165,000	....	25,041,000	25,041,000	23,066,000
ngary	36,728,000	4,876,000	8,230,000	13,106,000	36,543,000
	7,202,000	10,288,000	1,440,000	11,728,000	14,918,000
	206,000	700,000	700,000	1,400,000	....
	3,169,000	....	1,111,000	1,111,000	1,317,000
	158,848,000	79,424,000	11,913,000	91,337,000	24,527,000
	134,671,000	19,588,000	24,198,000	43,786,000	25,473,000
	103,000	103,000	206,000	309,000	5,350,000
	19,938,000	3,889,000	5,453,000	9,342,000	33,128,000
s	4,506,000	10,864,000	679,000	11,543,000	7,798,000
	1,543,000	....	411,000	411,000	782,000
	1,132,000	....	1,955,000	1,955,000	10,247,000
	7,942,000	....	2,181,000	2,181,000	2,428,000
	120,761,000	6,646,000	8,621,000	15,267,000	96,132,000
	565,000	....	350,000	350,000	494,000
	9,259,000	....	10,082,000	10,082,000	21,193,000
	2,181,000	....	1,008,000	1,008,000	5,909,000
	4,938,000	....	2,202,000	2,202,000	2,942,000
	10,288,000	6,173,000	2,058,000	8,231,000	....
	....	154,321,000	....	154,321,000	....
	....	195,473,000	....	195,473,000	7,613,000
	16,481,000	15,535,000	3,807,000	19,342,000	....
	4,115,000	39,794,000	....	39,794,000	....
lements	....	49,383,000	411,000	49,794,000	....
	26,605,000	....	1,317,000	1,317,000	....
	3,292,000	....	1,029,000	1,029,000	7,202,000
erican States	206,000	3,889,000	....	3,889,000	1,728,000
	1,029,000	309,000	....	309,000	....
	823,000	617,000	309,000	926,000	844,000
	1,770,000	21,811,000	....	21,811,000	823,000
rican States	18,374,000	5,144,000	2,058,000	7,202,000	113,169,000
es	143,272,000	114,959,000	15,597,000	130,556,000	81,687,000
	1,029,000	206,000	....	206,000	....
y	7,716,000	....	206,000	206,000	....
an Republic	6,008,000	....	247,000	247,000	....
	28,298,000	....	1,230,000	1,230,000	....

The amounts per inhabitant for the same countries are shown b

Country.	Gold.	Silver.	Uncovered Paper.	
	£ s. d.	£ s. d.	£ s. d.	£
United Kingdom	3 0 8	0 12 8	0 11 8	4
Austria-Hungary	0 16 4	0 5 10	0 16 3	1
Belgium	1 2 8	1 16 1	2 5 11	5
Bulgaria	0 1 3	0 8 6	....	0
Denmark	1 7 7	0 9 8	0 11 5	2
France	4 2 6	2 7 5	0 12 9	7
Germany	2 11 6	0 16 9	0 9 9	3
Greece	0 0 10	0 2 6	2 4 0	2
Italy	0 12 9	0 6 0	1 1 2	1
Netherlands	0 18 4	2 6 10	1 11 8	4
Norway	0 15 5	0 4 1	0 7 10	1
Portugal	0 4 6	0 7 9	2 0 7	2
Roumania	1 7 5	0 7 6	0 8 4	2
Russia	0 18 8	0 2 4	0 14 11	1
Servia	0 4 10	0 3 0	0 4 3	0
Spain	0 10 4	0 11 2	1 3 7	2
Sweden	0 8 10	0 4 1	0 15 11	1
Switzerland	1 12 11	0 14 8	0 19 8	3
Turkey	0 9 0	0 7 3	....	0
China	....	0 8 0	....	0
India	....	0 13 3	0 0 6	0
Japan	0 7 4	0 8 7	....	0
Siam	0 16 6	7 19 2	....	8
Straits Settlements	....	13 2 1	....	13
Egypt	2 14 8	0 2 8	....	2
Canada	0 12 10	0 4 0	1 8 1	2
Central American States	0 1 3	1 3 7	0 10 6	1
Cuba	0 11 5	0 3 5	....	0
Haiti	0 16 6	0 18 6	0 16 11	2
Mexico	0 2 10	1 14 8	0 1 4	1
South American States	0 7 2	0 3 10	3 0 4	3
United States	1 19 4	1 15 9	1 2 5	4
Hawaii	9 8 10	1 17 10	....	11
Cape Colony	4 10 9	0 2 5	....	4
South African Republic	6 18 1	0 5 8	....	7
Australasia	6 8 4	0 5 7	....	6

MOVEMENTS OF GOLD.

Since the discovery of gold in the year 1851 large quantities metal—in the form of coin as well as bullion—have been export the Australasian colonies every year. The returns of gold impo exported from each of the colonies, calculated for ten-year peri the year 1851 to the end of 1897, are given herewith. The tal show the amount by which the exports have exceeded the import various colonies, or *vice versa*, as the case may be. The largest e of gold, it will be found, are the largest producers, as Victori and, and Queensland. The other colonies now produce very little than suffices to meet their local requirements. The returns of the imports and exports for New South Wales, it must be remembered, wollen by large quantities of Queensland gold, which is simply sent ydney to be minted, and then exported in the shape of coin. The rts and exports for each colony were as follow :—

Colony.	Imports of Gold.					
	1851-60.	1861-70.	1871-80.	1881-90.	1891-97.	1851-97.
	£	£	£	£	£	£
South Wales	3,874,764	12,148,037	13,308,140	18,018,550	19,683,511	67,033,002
ria	4,349,457	11,821,815	10,868,837	7,486,861	10,193,945	44,720,915
sland	......	367,025	1,383,822	2,532,705	2,139,735	6,423,287
Australia	1,091,012	882,149	1,622,202	1,919,341	1,916,278	7,430,982
rn Australia	......	19,310	39,710	223,654	2,388,473	2,671,147
ania	......	50,500	402,446	569,958	367,350	1,390,254
Zealand	170,328	1,727,925	2,312,327	2,780,009	1,774,011	8,764,600
ustralasia	9,485,561	27,025,761	29,937,484	33,531,078	38,463,303	128,443,187

Colony.	Exports of Gold.					
	1851-60.	1861-70.	1871-80.	1881-90.	1891-97.	1851-97.
	£	£	£	£	£	£
South Wales	12,211,831	25,804,687	18,557,134	18,296,059	23,088,028	97,957,739
ria	90,691,591	74,430,857	48,091,469	30,593,232	24,581,216	268,388,365
sland	......	2,135,600	10,813,959	14,072,950	16,363,682	43,386,191
Australia	2,991,967	486,516	521,893	1,245,793	2,245,243	7,491,412
rn Australia	......	38,896	1,710	179,334	6,709,715	6,929,655
ania	843,029	25,245	567,486	1,442,712	1,358,173	4,236,645
Zealand	219,309	22,022,747	16,527,470	10,417,390	7,590,409	56,777,325
ustralasia	106,957,727	124,944,548	95,081,121	76,247,470	81,936,466	485,167,332

he excess of exports of gold for each colony during each of the ods shown was as follows :—

Colony.	1851-60.	1861-70.	1871-80.	1881-90.	1891-97.	1851-97.
	£	£	£	£	£	£
South Wales	8,337,067	13,656,650	5,248,994	277,509	3,404,517	30,924,737
ria	86,342,134	62,609,042	37,222,632	23,106,371	14,387,271	223,667,450
sland	....	1,768,575	9,430,137	11,540,245	14,223,947	36,962,904
Australia	1,900,955	*395,633	*1,100,309	*673,548	328,965	60,430
rn Australia	....	19,586	*38,000	*44,320	4,321,242	4,258,508
ania	843,029	*34,255	165,040	872,754	990,823	2,837,391
Zealand	48,981	20,294,822	14,215,143	7,637,381	5,816,398	48,012,725
tal excess of exports	97,472,166	97,918,787	65,148,637	42,716,392	43,473,163	346,724,145
erage per annum	9,747,217	9,791,879	6,514,364	4,271,639	6,210,452	7,377,109

* Excess of Imports.

BANKING.

he laws relating to banks and banking at present in force are sustible of great improvement, and the recent failure of many monetary itutions posing as banks has directed attention to the strong necessity entirely revising the conditions under which deposits may be taken n the general public. All institutions transacting the business of banking are required by law to furnish quarterly statements of th assets and liabilities in a specified form, and from these statements a the periodic balance-sheets the tables in this chapter have been compi The returns furnished by the banks, though in compliance with t law of the colony, are by no means satisfactory, being quite unsu to the modern methods of transacting banking business ; nor can they taken without question as indicating the stability or otherwise of t banks. As a rule, nothing can be elicited beyond what is shown in t balance-sheets. These are published half-yearly, with the exceptio those of three banks which are issued annually. No uniformity observed as regards the dates of closing the balance-sheets, and t modes of presentation are equally diverse. Important items which oug to be specifically stated are included with accounts of minor impo and, as a rule, current accounts are blended with other accounts, inste of being separately shown. The value of the information vouchsa to the public is illustrated by the fact that it was impossible to obta from the publications of several institutions suspending payment du 1893, the amount of their liabilities.

There are thirteen banks of issue operating in New South Wa four of which have their head offices in Sydney, two in Melbourne, t in Queensland, one in New Zealand, and four in London. Of the f local banks, three have branches outside New South Wales, and fourth confines its operations within the limits of the colony. T of the local banks—the Bank of New South Wales and the City Ban Sydney—carry on their business under the provisions of special A of incorporation, and the liability attached to the shareholder is lim by the Acts to the amount subscribed for and an additional amo equal thereto ; the Commercial Banking Company of Sydney (Limi and the Australian Joint Stock Bank (Limited) are registered limited companies. The following appears to have been the extent of liability of shareholders of banks trading in New South Wales at middle of 1898 :—

Bank.	Reserve or Capital Liability on ordinary shares when calls have been met.
	£
Bank of New South Wales	1,950,000
Commercial Banking Company of Sydney (Limited)	1,000,000
Australian Joint Stock Bank (Limited)	394,505
City Bank of Sydney	540,000
Commercial Bank of Australia (Limited)	Nil.
National Bank of Australasia (Limited)	718,407
Queensland National Bank (Limited)	276,832
Bank of North Queensland (Limited)	250,000
Bank of New Zealand	500,000
Bank of Australasia	1,600,000
Union Bank of Australia (Limited)	3,000,000
London Bank of Australia (Limited)	729,720
English, Scottish, and Australian Bank (Limited)	539,437

CAPITAL RESOURCES OF BANKS.

capital and reserves (including balances of Profit and Loss banks trading in New South Wales about the middle of nted to £22,535,298, but of this amount only £11,326,931 ed in the colony. The following is a statement of the capital stinguishing ordinary from preferential capital, and of the reserves held by each bank at the date of balancing :—

Bank.	Date of balance-sheet.	Capital paid up.			Reserve Fund.
		Ordinary.	Preferential.	Total.	
		£	£	£	£
uth Wales	Sept., 1898	1,950,000	Nil	1,950,000	1,200,000
nking Co. of Sydney (Ltd.)	Dec., 1898	1,000,000	Nil	1,000,000	1,010,000
t Stock Bank (Limited)	Dec., 1898	1,167,888	Nil	1,167,888	52,000
dney	Dec., 1898	400,000	Nil	400,000	100,244
nk of Australia (Limited)	Dec., 1898	965,441	2,117,070	3,082,511	*Nil
of Australasia (Limited)	Sept., 1898	1,669,849	305,780	1,975,629	50,000
ional Bank (Limited)	Dec., 1898	412,597	Nil	412,597	4,250
Queensland (Limited)	Dec., 1898	†100,000	Nil	100,000	2,000
aland	Mar., 1898	393,042	2,500,000	2,893,042	23,474
lasia	April, 1898	1,600,000	Nil	1,600,000	800,000
Australia (Limited)	Feb., 1898	1,500,000	Nil	1,500,000	‡1,000,000
f Australia (Limited)	Dec., 1897	§1,247,415	171,930	1,419,345	Nil
sh, and Australian Bank	June, 1898	‖539,437	Nil	539,437	31,229

rust special reserve account amounts to £53,000. † £100,000 written off in 1898.
,000 at contingency account. § Includes £6,825 prepaid in respect of reserve
£431,550 written off in 1898.

eding table shows the capital account at date of balancing, the banks had made calls on their shareholders which will eir paid-up capital. The amount of these calls and the total pital that will be available when they are met are shown in ng table :—

Bank.	Capital called and being called up.		
	Capital paid up.	Amount of Calls to be paid on ordinary shares.	Total Working Capital.
	£	£	£
outh Wales	1,950,000	Nil	1,950,000
nking Co. of Sydney (Limited)	1,000,000	Nil	1,000,000
t Stock Bank (Limited)	1,167,888	6,627	1,174,515
dney	400,000	Nil	400,000
nk of Australia (Limited)	3,082,511	724,429	3,806,940
of Australasia (Limited)	1,975,629	6,434	1,982,063
tional Bank (Limited)	412,597	2,651	415,248
Queensland (Limited)	100,000	Nil	100,000
ealand	2,893,042	106,958	3,000,000
lasia	1,600,000	Nil	1,600,000
Australia (Limited)	1,500,000	Nil	1,500,000
f Australia (Limited)	1,419,345	1,805	1,421,150
h, and Australian Bank (Limited)	539,437	Nil	539,437

The calls being made, as shown in the table just given, represent
of £848,904, and of this amount £6,627 is payable in Syd
£730,863 in Melbourne, £2,651 in Brisbane, £106,958 in
Zealand, and £1,805 in London. The paid-up capital of b
operating in New South Wales has very largely increased during the
twenty-two years, viz., from £7,930,000 in 1875 to £18,040,449 in 1
but these figures have no reference to the capital actually employ
the business of the banks, as will be seen from a subsequent
showing the excess of assets over liabilities in New South Wales
are here inserted only for the purpose of facilitating comparisons t
will inevitably arise when the question of the liabilities of ban
being considered. The decrease since 1896 is accounted for by
writing off of portion of the capital of some of the banks:—

Year.	Banks.	Paid-up Capital.	Year.	Banks.	Paid-up Capital.
	No.	£		No.	£
1875	10	7,930,000	1893	13	15,129,749
1880	11	9,531,212	1894	13	16,743,737
1885	14	10,512,300	1895	13	19,306,330
1890	17	13,929,326	1896	13	19,531,430
1891	16	13,526,136	1897	13	18,357,265
1892	14	12,384,637	1898	13	18,040,449

LOCAL BUSINESS OF BANKS.

The banks are required by Act No. 9 of 1898, which repeal
Act of Council 4 Victoria No. 13, passed in the year 1840, to
quarterly statements of their business in a prescribed form; but
statements are not all made on the same lines, and it is nec
therefore, to make certain adjustments in order to put the figure
comparative basis. The alterations consist in the exclusion fro
assets of two of the banks of the balances due by branches and a
outside New South Wales to the head office in Sydney. The fol
table shows the assets and liabilities, and the surplus assets of the
at intervals from 1860 onwards; the surplus assets may be tak
representing the amount provided by the banks from their own res

res in this and subsequent tables refer to the quarter ended ember :—

Year.	Assets within the Colony.	Liabilities within the Colony.	Surplus Assets (Capital and Reserves used in local business).
	£	£	£
1860	8,053,463	6,480,642	1,572,821
1865	9,193,540	6,962,315	2,231,225
1870	9,863,071	7,198,680	2,664,391
1875	15,545,507	15,056,485	489,022
1880	21,658,317	19,485,862	2,172,455
1885	37,737,869	29,687,296	8,050,573
1890	50,751,647	37,248,937	13,502,710
1891	51,934,372	37,589,764	14,344,608
1892	51,665,479	37,171,380	14,494,099
1893	48,794,036	34,102,172	14,691,864
1894	47,195,214	31,263,120	15,932,094
1895	45,622,329	32,037,052	13,585,277
1896	44,527,828	31,254,776	13,273,052
1897	43,980,722	31,026,523	12,954,199
1898	42,638,224	31,311,293	11,326,931

table just given be compared with the previous one, showing up capital of the various banks doing business in the colony, e seen that the general tendency has been for the banks to the proportion of their own capital employed in the colony, the last four years show a movement in the opposite direction. 1875 the paid-up capital of the banks was £7,930,000, and erves at the same date were £2,496,457, making a total of 457 available from their own resources, while their surplus nounted to only £489,022; ten years later, when the capital £10,512,300, and the reserves at £5,421,998, or together 298, the surplus assets were returned at £8,050,573; and in capital was £13,929,326, and the reserves £7,832,047, making £21,761,373, while the surplus assets reached the very con- proportion of £13,502,710. In December, 1898, however, the nd reserves of the thirteen banks now open showed a total of 298, and the excess assets of the local business amounted to 931.

The banking returns do not admit of any useful deductions
made from them, as the classification, both of assets and
required by the Schedule to the Act is obsolete; thus, under the
deposits not bearing interest, most of the banks are accustomed to
interest accrued and all debts due by them other than
interest, notes, and bills, the result being that in this respect the
are misleading. It unfortunately happens, moreover, that there
means of correcting the figures. That the over-statement is
able will appear from the fact that the census returns showed
not bearing interest as £7,828,906, as compared with a total in
quarterly statements of £9,363,727.

The assets, which naturally form the most interesting
bank's returns, show coin and bullion separately, but 93 per
of the other assets are marshalled together under the term
and bills discounted, and all other debts due to the bank," and the
on which business is conducted are therefore entirely hidden from
The following statement of liabilities for the past nine years
local business only :—

Year.	Banks.	Notes in circulation.	Bills in circulation.	Deposits.			Balances due to other Banks.
				Not bearing Interest.	Bearing Interest.	Total.	
	No.	£	£	£	£	£	£
1890	16	1,557,805	127,442	10,064,518	25,395,600	35,460,118	103,572
1891	15	1,674,049	146,202	9,188,873	26,470,817	35,659,690	109,823
1892	14	1,439,872	104,223	9,207,109	26,357,083	35,564,192	63,093
1893	13	1,804,531	75,086	8,557,840	23,584,119	32,141,959	80,596
1894	13	1,235,989	146,911	9,412,761	20,380,032	29,792,793	87,427
1895	13	1,223,864	117,327	10,222,437	20,406,822	30,629,259	66,602
1896	13	1,237,971	111,889	10,707,611	19,128,305	29,835,916	69,000
1897	13	1,227,964	112,113	10,582,621	19,024,114	29,606,735	79,711
1898	13	1,278,940	125,414	10,812,215	19,040,496	29,852,711	54,228

The assets for the same period were as given in the following

Year.	Banks.	Coin.	Bullion.	Legal Tender Notes.	Landed Property.	Notes and Bills discounted, and all other debts due to the Banks.	Notes and Bills of other Banks, and Queensland Treasury Notes.	Balances due from other Banks.
	No.	£	£	£	£	£	£	£
1890	16	5,619,111	87,659	....	1,644,179	43,009,559	287,568	103,571
1891	15	4,717,659	79,768	....	1,692,940	45,068,914	265,268	109,823
1892	14	5,217,371	95,894	....	1,801,590	44,135,729	227,795	187,101
1893	13	5,877,891	95,386	148,467	1,918,196	40,024,354	429,620	300,122
1894	13	7,350,005	100,525	....	1,938,321	37,378,947	214,563	232,913
1895	13	7,364,659	151,619	....	1,919,017	35,707,153	222,731	257,150
1896	13	6,760,851	187,845	....	1,914,483	35,116,696	223,487	[illegible]
1897	13	5,766,554	175,037	....	1,816,691	35,697,494	227,427	297,519
1898	13	5,564,870	200,310	....	1,812,804	34,403,700	256,997	[illegible]

METALLIC RESERVES OF BANKS.

proportion of metallic reserves which banking institutions must
lly keep in stock is not fixed by any enactment. Compared
e total liabilities, and with deposits at call and note circulation,
ntity of coin and bullion has varied very considerably from year
, as the following statement shows; but prior to 1892 the pro-
of gold to circulation and deposits at call rarely reached 50 per
nd the proportion to total liabilities varied between 13 and 26
t. The approach of the crisis of 1893 was foreseen, or at all
most institutions strengthened their reserves in anticipation of
in, while since the crisis all the banks have accumulated gold,
their stock of coin and bullion in the December quarter of 1898
d £5,765,180—that is to say, about four-and-a-half times the
rculation, and nearly one-half of the total liabilities at call.
an be no doubt that the gold accumulations of the banks in the
894, 1895, and 1896 were greatly in excess of ordinary business
ments, and were maintained solely as a precaution against a
of the unsettled conditions which marked the year 1893, but
the last two years a considerable reduction in the stocks of gold
en place owing to the large shipments of coin to Europe and the
States:—

Coin.	Bullion.	Total.	Proportion of Metallic Reserves—	
			To total Liabilities.	To deposits at call and note circulation.
£	£	£	per cent.	per cent.
1,578,424	90,052	1,668,476	25·7	*
1,328,504	125,554	1,454,058	20·9	*
1,291,177	86,744	1,377,921	19·1	*
2,317,600	104,947	2,422,547	16·1	40·4
3,488,554	75,008	3,563,562	18·3	49·5
4,027,055	76,260	4,103,315	13·8	39·2
5,619,111	87,659	5,706,770	15·3	49·1
4,717,659	79,768	4,797,427	12·8	44·2
5,217,371	95,894	5,313,265	14·4	57·4
5,877,891	95,386	5,973,277	17·5	57·7
7,330,005	100,525	7,430,530	23·8	69·8
7,364,659	151,619	7,516,278	23·5	65·7
6,760,851	187,845	6,948,696	22·2	58·2
5,766,554	175,037	5,941,591	19·2	50·4
5,564,870	200,310	5,765,180	18·4	47·7

* Amount of deposits at call unobtainable.

Advances by Banks

Under the head of advances are included bills and promissory discounted, cash credits, and miscellaneous debts. The bulk of adva made are secured by the mortgage of real estate or by the deposit deeds over which the lending institution acquires a lien ; the discoun of trade bills does not amount to more than about 15 per cent. of the cash credits and overdrafts. The banking returns are in such a defe form that an account of the nature of advances made, and the cla security advanced against, cannot be given. The most intere summary that can be made is that which the following table supplie

Year.	Advances.	Ratio of Advances to Deposits.	Amount of Advances per Inhabitant.
	£	per cent.	£ s. d.
1860	5,780,700	111·9	16 17 6
1865	7,100,361	121·8	17 15 0
1870	7,814,116	127·9	15 18 11
1875	12,483,713	91·4	21 17 1
1880	17,210,205	96·2	23 12 4
1885	31,344,909	117·4	33 16 1
1890	43,009,559	121·3	39 0 8
1891	45,068,914	126·4	39 8 3
1892	44,135,729	124·1	37 7 2
1893	40,024,354	124·5	33 0 4
1894	37,378,947	125·4	30 4 2
1895	35,707,153	116·6	27 18 10
1896	35,116,696	117·7	27 1 3
1897	35,697,494	120·6	26 19 5
1898	34,403,700	115·2	25 11 1

The useful purpose which the banking system serves may be r realised from the foregoing statement. The period extending from right on to 1885 was, on the whole, one of trade prosperity, and th out those years the ratio of advances to deposits ranged between 117 per cent. Since 1885 New South Wales, in common wi other colonies, has suffered more or less from depression, and th of advances to deposits has stood considerably higher, viz., from 126 per cent.

Deposits in Banks.

The total amount of money deposited with the thirteen banks ating in New South Wales in the middle of 1898 was approxi £103,837,677, and of this sum £29,852,711 was received locally. excess of the total over local deposits was employed in the countries to which the banks' business extended, some of course being used in New South Wales; but, from the very nature of the transactions of the banks, it is not possible to do more than make a surmise as to the amount so used. Dealing only with local deposits, the following statement shows the average amount of money deposited at various periods commencing with 1860; the distinction between interest-bearing deposits and those at call was first made in 1875:—

Year.	Deposits bearing Interest.	Deposits not bearing Interest.	Total Deposits.
	£	£	£
1860	…………	…………	5,164,011
1865	…………	…………	5,827,098
1870	…………	…………	6,107,999
1875	8,775,882	4,875,010	13,650,892
1880	11,948,383	5,934,641	17,883,024
1885	18,038,497	8,670,889	26,709,386
1890	25,395,600	10,064,518	35,460,118
1891	26,470,817	9,188,873	35,659,690
1892	26,357,083	9,207,109	35,564,192
1893	23,584,119	8,557,840	32,141,959
1894	20,380,032	9,412,761	29,792,793
1895	20,406,822	10,222,437	30,629,259
1896	19,128,305	10,707,611	29,835,916
1897	19,024,114	10,582,621	29,606,735
1898	19,040,496	10,812,215	29,852,711

The deposits reached their highest level in 1891, when there was entrusted to the banks a total of £35,659,690; since the date mentioned deposits to the extent of nearly six millions have been withdrawn, the reduction being entirely in interest-bearing deposits, which were very largely withdrawn in 1893 at the time of the bank crisis, and during the succeeding year. The withdrawals in 1894 were probably due to a combination of circumstances. Previous stoppages of payments had made many timorous depositors withdraw their fixed deposits on maturity, and place the money in the savings banks, as is evidenced by the fact that the New South Wales and Post Office Savings Banks increased their deposits by over one million and a half from 1892 to 1894; while the capital called up by the banks themselves absorbed a considerable sum which would otherwise have remained on deposit. To these two causes which tended to decrease the money on deposit with the banks may be added a third—the withdrawal of money for hoarding. That this last must have been considerable may be argued from the fact that the stock of gold in private hands was increased during 1893 by £1,003,473, and in 1894 by £321,793, while the gold needed for circulation probably decreased during those years. Since 1894 there has been a tendency to withdraw money from fixed deposit and to place it at current account. The current accounts have increased by one million since 1894, while the total deposits have remained al stationary since that period.

The interest offering for fixed deposits has now fallen to 3 per for sums deposited for twelve months; for six months' deposits interest allowed is at the rate of 1½ per cent. The practice of allo interest on money fixed for terms of less than six months was di tinued in May, 1894. The rates quoted, which were fixed on the March, 1896, are much the lowest that have been offered since b were first opened for business, and money equal to their requireme freely offered. The following is a statement of the average rate twelve months' deposits from 1860 onwards. The figures of the five years do not include interest payable on deferred deposit reconstructed banks:—

Year.	Bank Interest on Deposits for twelve months.	Year.	Bank Interest on Deposits for twelve months.
	per cent.		per cent.
1860	5	1891	4¾
1865	6	1892	5
1870	5	1893	4½
1875	5¼	1894	4¼
1880	5	1895	3½
1885	5	1896	3
1890	4½	1897	3

Under normal conditions the annual rate of interest paid on deposits is uniform for all banks; but some of the institutions have undergone reconstruction have not been in a position to r the rates on a large proportion of the deposits, so that they are p the ordinary market rate of 3 per cent. on deposits received reconstruction, while rates varying from 2 to 5 per cent. are paid on the extended deposits. The reconstructed banks have pow release their extended deposits at any time on giving the necessary of their intention to do so, and the deposits when renewed are accepted at the ordinary or reduced rate.

The liability to depositors of the reconstructed banks at the of suspension was £58,914,585; but up to the middle of £32,254,706 of the deposits had been liquidated, £2,594,780 t into preferential share capital, and £6,792,861 into inscribed o petual stocks or debentures, apart from £750,000 inscribed stock cr

Jnion Bank, so that there were then deposits to the extent of ,238 awaiting release. The complete statement of the deposit s of the thirteen banks operating at the middle of 1898 was as elow :—

Banks.	Deposits.					
	Capitalised (Preferential Capital).	Invested in bank stocks.	Extended deposits.	Fixed at ordinary rates.	At current account.	Total.
	£	£	£	£	£	£
ew South Wales	....	....	......	10,607,180	8,121,283	18,728,463
l Banking Co. of Sydney	....	....	......	6,098,633	3,627,130	9,725,763
Joint Stock Bank (Ltd.).	....	785,012	5,130,936	117,628	852,676	6,886,252
of Sydney.............	....	....	......	659,561	374,340	1,033,901
l Bank of Australia (Ltd.)	2,117,070	....	4,917,259	525,014	1,465,223	9,024,566
ank of Australasia (Ltd.)	305,780	....	1,644,984	2,280,587	2,237,263	6,468,614
d National Bank (Ltd.)..	....	3,116,619	1,831,326	365,368	1,475,145	6,788,458
orth Queensland (Ltd.) ..	....	50,000	......	95,958	97,063	243,021
ew Zealand	....	....	......	3,443,258	4,182,882	7,626,140
ustralasia	....	....	......	6,682,000	5,603,500	12,285,500
k of Australia (Ltd.)....	....	750,000	......	7,518,985	6,871,176	15,140,161
ank of Australia (Ltd.) ..	171,930	....	3,260,678	648,516	1,001,330	5,082,454
Scottish, and Australian (Ltd.)	....	2,841,230	487,055	375,353	1,100,746	4,804,384
Total	2,594,780	7,542,861	17,272,238	39,418,041	37,009,757	103,837,677

amount fixed at ordinary rates in the Commercial Bank of lia, Limited, includes the deposits in the "Special Assets Trust ny, Limited"; while the inscribed or perpetual stocks of the n, Scottish, and Australian Bank, Limited, include debenture The Bank of New Zealand has also 4 per cent. guaranteed o the amount of £2,000,000, and £500,000 in preference shares, bed by the Government.

e of the reconstructed banks accept their own deposit receipts at lue in liquidation of debts owing to them, and in payment of here debtors are unable to pay cash. Holders of negotiable s, however, wishing to sell in open market are obliged to prices below the face value, as will be seen in the subjoined table gives the rates offered for deposits of four banks. Towards se of 1895 the Bank of North Queensland and the Commercial

Banking Company of Sydney released the balance of their locke deposits, and since then some of the other reconstructed banks prepaid portion of their deposits. The prices here quoted are t ruling in Sydney at the beginning of July, 1898 :—

Bank.	Buying Price.
	£ s. d.
Australian Joint Stock Bank (Ltd.)—	
Repayable to 1907	0 14 0
Do after 1907	0 13 0
Commercial Bank of Australia (Ltd.)—	
Repayable to 1906	0 18 0
Do 1916, or sooner if possible	0 15 6
English, Scottish, and Australian Bank (Ltd.)—	
Perpetual	0 14 0
Repayable to 1904	0 18 0
Redeemable Deferred	0 13 0
Interminable	0 16 6
National Bank of Australasia (Ltd.)	1 0 0
London Bank of Australia (Ltd.)	0 16 2

The overdraft and discount rates remained almost stationary 1895, but during the last two years a decrease has taken place, e ally in the discount rates, while the decline since 1888 is almost to the fall in the deposit rates. Under ordinary circumstances, disc and overdraft rates should move down with the interest rates pa depositors; and it is therefore evident, from a consideration of the p and loss accounts of the various institutions, that the business of banks has now attained a healthier condition than has existed sinc crisis.

The rates for overdrafts and discounts for the ten years ended were as follow :—

Year.	Overdraft Rates.	Discount Rates.	
		Bills at 3 months.	Bills over 3 months.
	per cent.	per cent.	per cent.
1888	8 to 9	6 to 7	7 to 8
1889	9	7	8
1890	9	7	8
1891	9	7	8
1892	9	7	8
1893	8½ to 9	7	8
1894	7 ,, 9	6½ to 7	7 to 8
1895	7 ,, 8	6 ,, 6½	7
1896	6 ,, 7½	6 ,, 6½	7 to 8
1897	6 ,, 7	5 ,, 5½	5½ ,, 6½

bank exchange rate on London, at 60 days' sight, averages about ent., but is subject to a good deal of fluctuation. During the of the bank panic in May, 1893, it was 3½ per cent.; the banks date requiring all their available assets for other purposes. The r the ten years ended 1897 were:—

Year.	Exchange rate on London at 60 days' sight.	
	Buying.	Selling.
	per cent.	per cent.
1888	99½ to 100⅜	100¼ to 100⅞
1889	99½ ,, 100	100½ ,, 100⅞
1890	99⅜ ,, 100	100⅜ ,, 101¼
1891	99⅛ ,, 100	100⅛ ,, 100⅞
1892	99⅝ ,, 99⅞	100½ 100⅝
1893	97 ,, 99¾	100½ 100¾
1894	99½ ,, 99⅞	100½ 100¾
1895	99½ ,, 99¾	100⅝ 100¾
1896	99½ ,, 99¾	100½ 100¾
1897	99½ ,, 100⅛	100½ 100⅞

BANKS' EXCHANGE SETTLEMENT.

Banks' Exchange Settlement Office, which was established in r on the 18th January, 1894, is not a clearing-house in the d term, as the exchanges are still effected daily at the banks by of each institution; but the results of the daily operations are l to the Secretary of the Banks' Exchange Settlement, who hes the daily credit of each bank with the "pool." The "pool" is in the hands of three trustees, and consists of £700,000 in gold, is deposited in the vaults of three of the banks, and cannot be ted or disturbed. The contributions to the "pool" are according volume of the operations of each bank. The Secretary notifies ank daily of the amount of its credit with the "pool," and no s permitted to allow its balance to continue below 25 per cent. of ed contribution. In the event of its credit reaching this margin, k is required to make up its deficiency with gold; this payment, r, is not made to the pool, but to such other banks as may happen e at their credit with the pool a larger sum than is required by the ent. This arrangement enables the £700,000 comprising the remain intact.

The volume of the exchanges from the establishment of the poo
the end of 1897 is shown in the following table:—

Period.	Amount of Exchanges.
	£
18th Jan. to 31st Dec., 1894	101,242,905
1st ,, 30th ,, 1895	108,509,860
31st Dec., 1895, to 31st Dec., 1896...	117,718,862
1st Jan. to 31st Dec., 1897	121,645,873

NOTE CIRCULATION OF BANKS.

The issue of paper money is not at present limited by an enact
the law regulating note issue having lapsed on the 9th October, 1
Under the Stamp Duties' Act of 1880 a note tax of 2 per ce
imposed on the average circulation of each bank within the col
this tax on the present issue yields a return of about £2
per annum. The note circulation of banking companies has
declining, not only as compared with the population, but in a
volume. In 1885 there was an average of £1,793,686, represen
about £1 18s. 8d. per inhabitant; while in 1898 the total had fall
£1,278,940, and the average per inhabitant to 19s. In 185
note circulation was as much as £2 17s. 5d. per head, and in 1
£2 1s. 10d. The following is a statement of the average note issu
bills in circulation at intervals since 1860:—

Year.	Notes in Circulation.	Bills in Circulation.	Total.	Average per Inhabitant.
	£	£	£	£
1860	949,849	62,505	1,012,354	2·95
1865	729,076	67,875	796,951	1·99
1870	695,366	50,515	745,881	1·52
1875	1,114,411	37,008	1,151,419	1·97
1880	1,260,772	51,698	1,312,470	1·80
1885	1,793,686	59,327	1,853,013	2·00
1890	1,557,805	127,442	1,685,247	1·53
1891	1,674,049	146,202	1,820,251	1·59
1892	1,439,872	104,223	1,544,095	1·30
1893	1,804,531	75,086	1,879,617	1·55
1894	1,235,989	146,911	1,382,900	1·12
1895	1,223,864	117,327	1,341,191	1·05
1896	1,237,971	111,889	1,349,860	1·04
1897	1,227,964	112,113	1,340,077	1·01
1898	1,278,940	125,414	1,404,354	1·04

w does not require any special reserve to be maintained against tes, but, as already pointed out, the note issue is many times by the reserves ; thus in December, 1898, the note issue stood 8,940, while the gold in hand was £5,765,180.

west value for which notes are issued is one pound, and the the issue is of this denomination. During the operation of k Notes' Act of 1893, under which the issues of certain banks in number) were a first charge on their assets, and were legal hroughout the colony at all places except the head offices of ks issuing, there was a special tax of 2½ per cent. on the monthly issue. This tax was in substitution of the stamp duty cent., and ceased with the lapse of the Act in October, 1895.

WORKING EXPENSES AND PROFITS.

iblished balance-sheets of banks as a rule give very meagre ion of the results of their working, and with one exception possible to ascertain the amount of the gross profits. In ter of management expenses equal reticence is observed, not whose head office is in the colony giving this information to holders. The net profits are therefore the only data on which rative statement can be based, and the ratio of such to paid-up nd reserves, and to the banks' trading and total assets, will be the subjoined statement:—

Bank.	Net Profits for twelve months, 1897-8.	Ratio of Net Profits to—		
		Paid-up Capital and Reserves.	Total Trading Assets.	Total Assets of all kinds.
	£	per cent.	per cent.	per cent.
w South Wales	176,170	5·56	0·71	0·69
Banking Co. of Sydney (Limited)	81,274	4·01	0·62	0·60
Joint Stock Bank (Limited)	4,012	0·33	0·05	0·05
f Sydney	16,326	3·20	1·05	0·96
Bank of Australia (Limited)	81,514	2·64	1·29	1·18
nk of Australasia (Limited)	28,529	1·38	0·36	0·32
National Bank (Limited)	18,000	4·32	0·25	0·24
rth Queensland (Limited)	2,067	2·02	0·48	0·47
w Zealand	102,532	3·43	0·83	0·81
stralasia	78,825	3·27	0·45	0·44
of Australia (Limited)	85,132	3·37	0·43	0·41
k of Australia (Limited)	27	....	....	....
ttish, and Australian Bank (Limited)	6,034	1·05	0·12	0·11

sults shown in the above table must be regarded as very satis- when compared with the figures for 1896–7. All the banks ceeded in carrying on operations at a profit, and although in es the amount is small, it should be remembered that the drought of 1897–8 precluded any large additions to the profits over, four of the institutions showed an absolute loss on the tions of the previous twelve months, so that the recovery i further evidence of the returning prosperity of the people.

Intimately connected with the question of profits is that of expenses, and it must be confessed that the cost of working institutions in Australasia is undoubtedly large. This is partly the wide and sparsely populated area over which operations are on, and partly to the class of business in which banks are engaged following is a statement of the cost of management of the several enumerated :—

Bank.	Expenses of Management months, 1897–8.	
	Total.	Ratio to resources Capital, Deposits, Circul
	£	per
Bank of New South Wales	Not available.	
Commercial Banking Company of Sydney (Limited)		
Australian Joint Stock Bank (Limited)		
City Bank of Sydney		
Commercial Bank of Australia (Limited)	91,784	
National Bank of Australasia (Limited)	109,023	
Queensland National Bank (Limited)	70,556	
Bank of North Queensland (Limited)	10,311	
Bank of New Zealand	Not available.	
Bank of Australasia	221,036	
Union Bank of Australia (Limited)	232,672	
London Bank of Australia (Limited)	77,090	
English, Scottish, and Australian Bank (Limited)	82,369	

It will be observed that the expenses of working the four loc and the Bank of New Zealand are not shown in the statem given. These banks do not disclose even to their shareholders th of their business, so that the reference to the cost of banking is seriously incomplete; but taking such banks as are enumera guide to the whole of the institutions, the total expenses of man of the thirteen banks which have offices in the colony may be for the year 1897–8 at £1,631,200.

The following statement may be taken as approximately corr

Total trading assets	£130,66
Capital and reserves	22,53
Gross earnings, less reserve for bad and doubtful debts, and rebate on bills current	4,6
Gross expenditure, including interest	3,9
Net earnings	6

mpared with the total assets, the net earnings represent 0·5 per , and compared with the banks' own resources—*i.e.*, capital and ved profits—3·0 per cent. The gross expenditure set down above be divided into expenses of management, £1,631,200, and interest, 97,140; these together amount to 85·2 per cent. of the gross ings, the management expenses being 35·4 per cent., and the est 49·8 per cent. It would therefore appear that for every £1 of earnings, £2 7s. 11d. are spent in management expenses, and 7s. 6d. in interest. The cost of working banking institutions in ralia is undoubtedly very large; but this class of business is everye expensive, and an analysis of the balance-sheets of twenty sh joint stock banks shows that the expenses of management nt to nearly 16s. for every £1 of net earnings.

order that a comparison may be made with the results obtained re the financial crisis, the following figures for the year 1892 are n:—

Total trading assets	£155,582,833
Capital and reserves	19,084,148
Gross earnings, less reserve for bad and doubtful debts	7,638,400
Gross expenditure, including interest	6,068,600
Net earnings	1,569,800

he net earnings in 1892 equalled 1·01 per cent. of the total assets, 8·23 per cent. of capital and reserves.

he following table affords a comparison of the working of New h Wales banks with the joint stock banks in the United Kingdom. figures relate to the years 1897 and 1898:—

Banks.	No. of Banks	Capital and Reserves.			Total Earnings.	Deposits.	
		Paid-up Capital.	Reserves and Undivided Profits.	Total.		Total.	Percentage of Earnings to Deposits.
		£	£	£	£	£	
English	94	60,104,600	34,507,400	94,612,100	6,656,000	579,027,700	1·15
Scotch	10	9,302,000	7,184,500	16,486,500	1,475,000	96,886,000	1·52
Irish	9	7,114,000	3,763,700	10,877,700	887,000	43,666,000	2·03
N. S. Wales	13	18,040,400	4,494,900	22,535,300	680,400	29,852,700	2·28

e net profits of the banks of this colony, and the allotment of such r the accepted heads, are given below. It will be noticed that in instances only have the reserve funds been strengthened. The iculars are as follow, the dates of the balance-sheets being shown age 983. The figures for the Bank of New Zealand are for twelve ths, and the amount shown as transferred to reserve, etc., includes

£10,132 paid in reduction of the Estates Company's Debentu sion Account, and £39,391 paid to the Assets Realisation B the £74,900 carried forward will also be paid to the same B

Bank.	Balance brought forward.	Net Profits for half-year.	Total.	Half-yearly Dividend.	
				Rate per cent. per annum.	Amount.
	£	£	£		£
Bank of New South Wales	16,943	88,042	104,985	9	87,750
Commercial Banking Co. of Sydney (Ltd.).	15,817	40,864	56,681	8	40,000
Australian Joint Stock Bank (Ltd.).	5,471	266	5,737	Nil.	Nil.
City Bank of Sydney	8,976	8,053	17,029	4	4,000
Commercial Bank of Australia (Ltd.).	7,542	52,801	60,343	Pref. 2 Ord. nil.	21,171
National Bank of Australasia (Ltd.).	37,480	17,602	55,082	Pref. 5 Ord. nil.	7,844
Queensland National Bank (Ltd.).	Nil.	†9,000	9,000	......	‡2,250
Bank of North Queensland (Ltd.).	587	1,479	2,066	......	Nil.
Bank of New Zealand	39,391	102,532	141,923	Pref. 3½ Ord. nil.	17,500
Bank of Australasia	18,276	38,546	56,822	6	48,000
Union Bank of Australia (Ltd.).	24,503	47,696	72,199	5	37,500
London Bank of Australia (Ltd.)	1,812	27	1,839	......	Nil
English, Scottish, and Australian Bank (Ltd.).	10,870	6,034	16,904	......	Nil.

* To Special Assets Trust Reserve Account. † After placing £12,255 to Conti
‡ Repayment to Government. § Inclusive of £4,500 to private Depositors R
‖ In reduction of Bank Premises Account.

Most of the banks have contrived to reduce their workin during the last few years; this has been accomplished mainl unprofitable branches. There are eight institutions for expenses of management for 1894–5 and 1897–8 can be st banks show a reduction in expenditure to the extent of over

The number of banks and branches open throughout Wales in 1898 was 414, or 90 less than in 1892. This giv tion of one bank or branch to every 3,200 persons. In E proportion is one bank to 10,000 persons, in Scotland on 4,000, and in Ireland 1 to every 9,000.

DIVIDENDS OF BANKS.

No feature of banking business was, until a few years spicuous as the large dividends. The vast changes brough the bank crisis of 1893 materially interfered with the earnin banks, and of the thirteen operating in the colony eight we to declare a dividend on their ordinary share capital durin

3. A comparison between 1892-3—that is, the year before the —and the year 1897-8 is afforded by the following table, which only to dividends paid on ordinary share capital :—

Bank.	Dividend per cent.	
	1892-3.	1897-8.
Bank of New South Wales	17½	9
Commercial Banking Company of Sydney (Limited)	25	8
Australian Joint Stock Bank (Limited)	15	Nil.
City Bank of Sydney	10	4
Commercial Bank of Australia (Limited)	12½	Nil.
National Bank of Australasia (Limited)	12½	Nil.
Queensland National Bank (Limited)	10	Nil.
Bank of North Queensland (Limited)	5	Nil.
Bank of New Zealand	5	Nil.
Bank of Australasia	12½	6
Union Bank of Australia (Limited)	12	5
London Bank of Australia (Limited)	8	Nil.
English, Scottish, and Australian Bank (Limited)	4	Nil.

SAVINGS BANKS.

e institutions classed as savings banks may be divided into two —those worked in conjunction with the Post Office, and, consetly, directly administered by the State; and those under trustees, are nominated by the Government. The declared objects of these s are to encourage thrift in the working classes, and to provide a investment for the funds of charitable institutions, friendly socie- and such like. The savings banks have, however, become so popular all classes of the community are represented among their depositors. e Post Office or Government Savings Bank was established in , and the Savings Bank of New South Wales as far back as 1832. rate of interest in the former institution was reduced on the 1st 1896, to 3 per cent. per annum. At the close of 1897 the liabili- of the bank amounted to £4,708,501, of which £4,691,833 repre- d deposits, and £16,668 balance of profit and loss account. The tments made by the Treasury on behalf of the bank were as follow :—

	£
Government Debentures	113,200
Funded Stock, 36 Vic. No. 21	296,467
,, 56 Vic. No. 1	1,000,000
1924 Stock, 58 Vic. No. 14	20,000
1925 ,, and Funded Stock, 59 Vic. No. 6	1,030,000
Treasury Bills, 53 Vic. No. 9	659,000
,, 59 Vic. No. 22	1,024,700
Cash at credit of Trust Account	468,677
,, in hands of Controller	26,225
Interest due on Investments and on uninvested Funds, at 3 per cent.	70,232
Total	£4,708,501

The Savings Bank of New South Wales was originally administered nine trustees, one of whom was vice-president; but under an ing Act passed in 1853, the number may be increased, but cannot eighteen. The trustees have power to nominate a managing who, if not already a trustee, becomes one *ex-officio*. The number trustees at the end of 1897 was eleven, exclusive of the trustee. Unlike those of the Post Office Savings Bank, the funds of the institution are applied to investments of a general nature, such as gages, Government and municipal securities, and deposits with of issue and the Treasury. The amount invested under each including interest accrued, at the close of 1897, was as follows:—

How invested.	Amount.
	£
Mortgages	1,005,220
Government and Municipal Securities	213,454
Fixed Deposits:—	
Banks of Issue	1,120,925
Treasury	2,199,012
Uninvested	179,552
Total £	4,718,163

The reserve fund, depreciation account, and profit and loss accou on the 31st December, 1897, amounted to £272,736. According to published statements of this institution, it could pay £1 1s. $2\frac{3}{4}$d. every £1 liability. The classification of the deposits on the 1st Janua 1898, was as follows:—

Classification.	Depositors.	Deposits.	Average per Depositor.		
	No.	£	£	s.	d.
£20 and under	41,029	177,485	4	6	6
Over £20 and under £50	10,130	326,998	32	5	8
£50 and under £100	7,864	555,784	70	13	6
£100 ,, £200	9,099	1,261,706	138	13	4
£200 ,, £300	7,731	1,638,700	211	19	4
£300 and upwards	433	484,287	1,118	8	11
Total	76,286	4,444,960	58	5	4

During 1897 interest was allowed in the New South Wales Sa Bank at the rate of 3 per cent. per annum on accounts closed du the year. On accounts current at the close of a year a higher ra allowed; this latter is not fixed, but $3\frac{1}{2}$ per cent. was paid for the 1897. Both in the Post Office Savings Bank and in the New S Wales Savings Bank sums of 1s. and any multiple of that amount

osited ; but with the exception of the funds of charitable institu-
nd friendly societies, deposits exceeding £200 do not bear interest
h excess. The bulk of the deposits over £200 probably belong
titutions of the classes mentioned.

ring the year 1897 there was an increase of 14,021 in the number
ositors in the savings banks, and of £614,170 in the amount of
posits. This increase was fairly divided between the two banks
as the amount is concerned, but the increase in the number of
itors in the Post Office banks is more than three times that in the
gs Bank of New South Wales. By comparing the annual figures
the amount deposited per inhabitant, the increase will be found to
portionately greater than that of the population. The number of
tors at the close of the last three years and the amount to their
were as follow :—

Banks.	1895.		1896.		1897.	
	Depositors	Deposits.	Depositors	Deposits.	Depositors	Deposits.
	No.	£	No.	£	No.	£
s Bank of South Wales	71,099	3,951,875	73,222	4,149,658	76,286	4,444,960
ffice Banks...	131,703	4,121,700	140,386	4,372,965	151,343	4,691,833
Total	202,802	8,073,575	213,608	8,522,623	227,629	9,136,793

REGISTERED COMPANIES.

Land, Building, Investment, and Trading Companies established
he object of making profit and doing general business, may be
ered under the Companies Act of 1874 ; Benefit Building, Invest-
Co-operative, and Industrial Societies, worked for the mutual
t and advantage of the subscribing members only, may be registered
the Friendly Societies' Act of 1873 ; and Mining Companies in
the shares carry no liability fall under the No-liability Mining
anies' Act of 1896.

provisions of the Companies' Act are so framed that they are
able to nearly all classes of financial institutions, very few of
are now carried on under special Acts. According to the records
Registrar of Joint Stock Companies, there appeared to be about
mpanies whose registration stood good at the middle of 1898, but
elieved that in this number are included some companies which
eally passed out of existence without the formal and legal steps
ed by the Act being taken.

istered companies are required to furnish their shareholders with
odical balance-sheet, according to a prescribed form, and to forward
Registrar an annual statement showing the share register and the
ctions of the capital account. Besides this, companies registered
uent to the year 1879, receiving money on deposit within the

colony, are required to furnish quarterly statements of the averag and liabilities of their local business in the same manner as bank panies. Of the 545 companies in operation at the middle of 189 17 were returned as receiving money on deposit, in addition t company registered under the Victorian Act; the remaining comp with an exception here and there, conduct their business on the scribed capital alone. The 545 companies referred to above ar clusive of 4 companies registered under section 8, the liabili members being limited by guarantee; 2 companies with unli liability, under sections 9 and 224; and 15 companies, not for registered under section 54.

The registrations under the Companies' Act for the five years 1897 were:—

Registrations.	1893.	1894.	1895.	[illegible]
New Companies registered	73	90	77	[illegible]
Old Companies incorporated by Act of Parliament, registered under clause 224 of the Act, for purpose of winding-up	4	....	....	....
Companies wound-up	78	57	71	[illegible]
Declarations, statements, etc., that certain Companies have been defunct	156	57	119	[illegible]
Amount of fees received £	1,123	1,038	1,034	[illegible]

In the number of companies shown in the above table as wound included several defunct companies which have been reconstruct in the number shown as having become defunct during the same are included many which ceased operations in previous years notifying the Registrar at the proper time; still, after mak necessary allowances on these points, the five years mentioned unusually large number of winding-up notices.

During 1890 most of the deposit, land, building, and investme panies were presumed to be in a flourishing condition. Their di to shareholders were very large, and the rates allowed on depos considerably in excess of those current in the banks of issue. have been expected, the high interest offered was too tempting be resisted by a section of the investing public, and large su placed in these institutions with the utmost confidence that the be available when required. This confidence, unfortunately, p be, in many instances, unmerited. The shrinkage of land val the depreciation of real estate generally, put an end to all institutions working on speculative lines, as well as to som companies that were conducted on reasonable principles. In 1891, three of these institutions suddenly suspended payment, were followed within a short time by others, several of whi placed in liquidation; while a considerable number of the institutions are now carrying on their business under the prov the Joint Stock Companies Arrangement Act of 1891, w

afford relief to *bona fide* institutions which, through no fault of
ı, became embarrassed. This Act expired on 1st January, 1896,
iament extended its operations until the 1st January, 1899.
abilities, assets, and paid-up capital of the seventeen deposit
s, for the quarter ended December, 1898, were as follow :—

ies.	Number.	Liabilities (exclusive of Liabilities to Shareholders).			Assets.			Paid-up Capital.
		Deposits.	Other Liabilities.	Total.	Landed Property.	Other Assets.	Total.	
		£	£	£	£	£	£	£
......	14	442,030	485,208	927,238	1,268,336	487,611	1,755,947	993,406
......	3	338,573	623,926	962,499	899,791	3,372,775	4,272,566	2,757,924
.....	17	780,603	1,109,134	1,889,737	2,168,127	3,860,386	6,028,513	3,751,330

ifficulties into which the deposit companies fell may for the
t be attributed to their practice of borrowing money for short
and locking it up for long terms. Besides this, however,
-called building societies indulged in speculative land pur-
nd having retailed the land at enhanced prices, with payments
ended periods, proceeded to divide the presumed profits among
eholders, with a result that might easily have been foreseen,
ıny cases the purchasers, after paying a few instalments toward
, left the allotments on the hands of the companies, whose
ed profits were therefore purely visionary, and whose dividends
lly never earned, but, in many instances, were merely taken
deposits.

BENEFIT BUILDING AND INVESTMENT SOCIETIES.

ling to the provisions of the Friendly Societies Act of 1873,
ber of persons may form themselves into a Benefit Building and
nt Society for the purpose of raising money by subscription to
ıembers to erect and purchase dwellings, etc., which must be
o the society by mortgage until the amount of the shares has
ly paid. These institutions, as previously mentioned, are
ed solely for the benefit and advantage of the subscribing
, and their operations are, as a rule, confined to the subscrip-
here were, however, 9 institutions in 1897 receiving money
it from the general public, the aggregate amount of which was
. At the close of 1897 the Benefit Building and Investment
which had been registered under the Friendly Societies Act
l 129, of which only 31 were in operation at that date. Of the
titutions, some had ceased to exist through being Terminating

Societies; others had become Limite
Act, and consequently ceased to operat
and a large number had become defu

Returns have been received from
The liabilities and assets, etc., of thes
were as follow :—

Societies.	Number.	Liabilities (exclusive Liabilities to Sharehold		
		Deposits.	Other Liabilities.	T
		£	£	
Starr-Bowkett	8	Nil.	7,810	
Building	5	7,018	22,600	2
Building and Investment.	10	137,694	23,180	16
Land, Building, and Investment.	6	174,623	10,720	18
Total	29	319,335	64,310	38

CO-OPERATIVE TRADING AN

Particulars of these societies are gi
dealing with Employment and Produ

NO-LIABILITY MIN

Under the No-Liability Mining
repealed the 1881 Act, shareholders
under the Act are not liable to be
they are not entitled to receive divi
is due and unpaid; if calls are mad
days after the expiration of the per
are forfeited. Companies registered
certain provisions of the Companies' A
during the last twelve years numbe
appear that, in spite of the low regis
Act are not very largely made use
last eight years were as follow :—

Year.
1890 ....
1891 ....
1892 ....
1893 ....
1894 ....
1895 ....
1896 ....
1897 ....

L Deposits in Banks and Investment Companies.

int of deposits at the end of each of the last ten years in the ssue, the Savings Banks, and the Building and Investment is given in the subjoined table. The increase during the ears was rapid, not only absolutely, but also as compared icrease in population; but in the course of the last four nount per head has fallen considerably. During the period rs embraced in the table the deposits increased from 1 to £39,822,224, the rate per head being £30 1s. 10d. in ipared with £36 10s. 7d. in 1888. The amount under each st December of each year was as follows:—

Deposits.				
Banks Issue.	In Savings Banks.	In Building and Investment Companies.	Total.	Amount per head of Population.
£	£	£	£	£ s. d.
17,311	4,037,675	2,442,065	38,397,051	36 10 7
77,142	4,280,083	2,599,272	40,656,497	37 11 5
60,118	4,730,469	3,199,554	43,390,141	38 13 6
59,690	5,342,135	2,595,489	43,597,314	37 8 3
64,192	5,706,081	2,082,223	43,352,496	36 4 0
41,959	6,535,758	1,516,567	40,194,284	32 17 1
92,793	7,217,000	1,836,540	38,846,333	31 0 10
29,257	8,073,575	1,289,016	39,991,848	31 5 11
35,916	8,522,623	1,335,416	39,603,955	30 11 10
06,735	9,136,793	1,078,696	39,822,224	30 1 10

sits in investment and building companies for the four years to 1897 are inclusive of the amounts deposited in benefit, id investment societies registered under the Friendly Societies' -£554,729 in 1894, £473,880 in 1895, £424,292 in 1896, 35 in 1897. Similar information for years prior to 1894 is le.

Trade Marks.

le Marks Act of 1865 provides for the registration of trade for the prevention of the fraudulent marking of merchandise. thirty-three years the Act has been in force, 6,463 trade marks, ge of 196 per annum, have been registered, the average of r years being considerably in excess of that for the whole he more careful discrimination now exercised with regard gns submitted has had the effect of bringing the Act into our. The registration of a trade mark does not confer any patent rights, but acts as a commercial safeguard and as an encou ment to manufacturers to produce goods of a superior quality.

The goods or manufactures which may be protected by trade are classified for the purposes of efficient registration into fifty divisions; the fees, however, are the same for each class. The actions under the Act and the fees received during each of th years ended 1897 were as follow :—

Transactions.	1893.	1894.	1895.	1896.
Applications for trade marks.........	394	546	516	475
New trade marks granted	304	381	397	355
Trade marks transferred	63	94	52	26
,, refused and withdrawn	27	66	61	37
Amount of fees received ....£	1,071	1,430	1,450	1,389

The figures given do not wholly apply to registrations of manufacturers, as trade marks, like patents, are unprotected colony if not registered locally. The registration fees are a of income to the State, as an application for registration costs guineas, and a transfer of a trade mark one guinea; no are, however, made for applications withdrawn or refused. Th collected during 1897 amounted to £1,542, or £675 more than received for registrations under the Companies Act.

MONEY ORDERS AND POSTAL NOTES.

The money order and postal note systems are worked in conj with the Post Office Savings Bank, the three constituting one sub-departments administered by the Postmaster-General. Un money order system money may be transmitted from any part o South Wales where an office is open to any part of the civilised The orders are sent either direct to the place of payment or t intermediary agencies, all places within New South Wales neighbouring colonies being dealt with direct, while to places Australia the intermediary system is applied. Under the post system exchanges are effected between this colony and V Queensland, South Australia, and Tasmania; but its original obj to afford means of transmitting amounts of £1 and under to within the colony. As regards small remittances within the the money order and postal note systems cover somewhat th ground; but as the convenience both of sender and receiver is in of the postal note, it is anticipated that the money order syst be almost entirely confined to business of more than £1.

ey order system was adopted in January, 1863. In that vere 3 orders issued for every 100 persons in the colony, tal value of the orders was £53,862; while in 1897 the d risen to 32 per 100 inhabitants, and the total value to The growth of the business has been mainly due to the ! the sphere of operations, both locally and elsewhere, and er appreciation of the system, especially by the wage-earning e community. Appended is a statement of the business n 1897:—

d in New South Wales.			Drawn on New South Wales.		
on—	Number	Value.	Issued and paid in—	Number	Value.
		£	**Australasia—**		£
ales (Inland)..	294,338	1,009,030	New South Wales (Inland)	295,121	1,011,877
....	29,250	93,079	Victoria	15,234	50,901
....	7,080	27,518	Queensland	16,993	60,337
ia	11,686	36,720	South Australia	5,067	16,717
ralia	3,030	17,101	Western Australia	39,500	177,744
....	14,861	20,242	Tasmania	3,894	9,984
....	3,939	12,024	New Zealand	11,173	30,138
a and Europe	23,306	66,339	United Kingdom and Europe	12,390	39,408
t)...........	863	3,799	Germany (direct)	326	2,092
....	419	2,774	Italy (direct)	22	117
....	153	758	Canada	214	916
....	1,857	5,290	United States	857	3,355
....	1,393	11,839	India	206	688
....	105	386	Ceylon	56	112
nts..........	18	79	Straits Settlements	49	155
....	831	4,024	Hong Kong	98	242
ope	137	778	Cape of Good Hope	2,557	16,543
....	33	70	Mauritius	22	138
sued	393,299	1,311,850	Total drawn	403,779	1,421,524

wing table covers a period of ten years, and distinguishes n on New South Wales from those drawn on other countries. een that the amount of money transmitted to countries out-South Wales exceeded the money received in every year 6 and 1897. In the months of August, September, and ge numbers of shearers are at work in various parts of the ny of them are but temporary visitors, whose homes are in d other adjoining colonies, and during their stay in New s they transmit a portion of their earnings to their families, balance of exchanges, so far as Victoria is concerned, is against New South Wales. There is also a considerable from the colony to Great Britain and Ireland, representing relatives. On the other hand, bread-winners belonging uth Wales, but now seeking their fortune elsewhere, make to their families who have remained behind; the principal

remittances of this kind are receive
and, and the Cape of Good Hope :

Year.	Issued in New South Wale		
	Drawn on New South Wales.	Drawn on other Countries.	T
	£	£	
1888	903,797	311,335	1,21
1889	890,501	297,726	1,18
1890	955,244	297,061	1,25
1891	1,236,425	341,319	1,57
1892	1,436,300	328,413	1,76
1893	1,266,691	349,194	1,61
1894	1,017,003	298,634	1,31
1895	985,771	283,429	1,26
1896	1,019,556	294,039	1,31
1897	1,009,030	302,820	1,31

The system of postal notes has
money-order business, but when full
will be found that there has been
number and amount of transactions
visible in almost every form of mer

It is the practice of New South W
countries to which money is transmi
the orders forwarded to each, the rat
per cent., and a similar allowance i
doing a return business. The amou
on this account during the last eight

Year.	Paid.
	£
1890	2,75
1891	3,171
1892	2,39
1893	2,21
1894	1,89
1895	1,771
1896	1,81
1897	1,89

Money orders drawn on places wi
the commission ranging from 6d. t
to 4s. for orders on the other colo

y, Italy, and the United States, the maximum sum for which
may be obtained is also £20, and the charges vary from 6d.
while on all other countries the limit is fixed at £10, and
mission at from 6d. to 5s. The total amount of commission
l from the public for each of the seven years from 1890 to 1897
below, and against this amount is placed the excess of payments
eipts shown in the preceding table :—

Year.	Commission received.	Net Payments to Other Countries.	Net Collections.
	£	£	£
1890	16,939	115	16,824
1891	19,198	*293	19,491
1892	19,309	326	18,983
1893	19,038	526	18,512
1894	15,828	445	15,383
1895	14,863	234	14,629
1896	15,232	*514	15,746
1897	15,133	*400	15,533

* Net receipts from other countries.

lowance has been made for the stamp duty of 1d. charged on
s issued in New South Wales, and of 2d. imposed on all orders
d upwards paid in the colony.

l notes were first issued in New South Wales on the 1st
1893, under the authority of a special Act of the Legislature.
isactions during 1897 were as follow :—

nomination.	Issued in New South Wales.		
	Drawn on—		Total.
	New South Wales (Inland).	Other Colonies.	
	£ s. d.	£ s. d.	£ s. d.
. inclusive	55,900 2 6	22,819 13 6	373,159 11 0
"	144,740 5 0		
15s. "	48,013 10 0		
	101,686 0 0		
ted	3,920 2 10	202 4 10	4,122 7 8
al ...£	354,260 0 4	23,021 18 4	377,281 18 8

nomination.	Drawn on New South Wales.				
	Issued in—				Total.
	Victoria.	Queensland.	South Australia.	Tasmania.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
. inclusive	1,267 14 0	1,058 10 0	354 9 6	116 12 6	2,797 6 0
"	2,596 5 0	1,859 15 0	567 15 0	186 0 0	5,209 15 0
5s. "	917 3 6	661 13 0	201 9 0	44 3 6	1,824 9 0
	4,344 0 0	2,403 0 0	541 0 0	214 0 0	7,502 0 0
ted	80 0 4	75 4 9	28 3 1	8 15 11	192 4 1
al ...£	9,205 2 10	6,058 2 9	1,692 16 7	569 11 11	17,525 14 1

No commission is paid by one colony to another in respect of obtained for intercolonial use, but poundage is charged both colony in which a note is issued and by that in which it is cashed. poundage collected in New South Wales during the last quarter o was £549; during the year 1894, £3,878; during 1895, £ during 1896, £7,839; and during 1897, £9,092. The notes ra value from 1s. to 20s., and the poundage payable thereon varies 1d. to 4d., according to the following scale :—

Value of note.	Poundage.	Value of note.	Poundage.
s. d.	d.	s. d.	d.
1 0	1	5 0	2
1 6	1	7 6	2
2 0	1	10 0	3
2 6	1	15 0	3
3 0	1	20 0	4
4 0	1		

INSURANCE.

There are no Acts of the New South Wales Parliament regu the business of fire, life, and other forms of insurance, and local panies engaged in the business are either incorporated under s Acts or under the Companies Act. As the law does not requi publication of returns of the business transacted within the colo is not customary for companies to disclose this information. The figures available, therefore, are those relating to their whole busi but the cases are few in which a statement of the whole business company throws light on its operations in New South Wales. inconvenience arising out of the state of the law in regard to insu has been the subject of complaint by all companies seeking to tra business on sound lines, especially those companies engaged in insurance. No deposit or other guarantee of genuineness is req and it is open to any one to start a life office, the business trans being only limited by the extent to which the credulity of the p may be abused. The evils in regard to fire companies are not so as for life companies, as the risks taken are almost invariably for periods; but they are sufficiently great to call for speedy remedy.

vere seventy-five companies, including the two Underwriters' ons, operating in the colony during 1897; of these, only eleven l institutions. The number doing each class of business was :—

of Business.	Head Office.				Paid-up Capital.
	In New South Wales.	In other Australasian Colonies.	Outside Australasia.	Total.	
					£
....	4	5	3	12	....
....	3	....	10	13	1,671,894
....	....	2	18	20	2,145,432
....	....	....	10	10	3,988,328
ine	2	6	2	10	712,006
dent....................	....	....	1	1	272,064
d Marine	....	....	3	3	1,387,495
and Guarantee	....	1	....	1	75,000
rine, and Guarantee..	....	1	....	1	125,000
Accident, Guarantee, Glass	....	2	....	2	68,967
Associations	2	....	....	2	....

e assurance effected by the "Fire and Life" offices forms a l proportion of their total business.

FIRE INSURANCE.

ount of the net risks held in the metropolitan area is obtainable 15th clause of the Fire Brigades Act of 1884, which requires any holding risks within the proclaimed area under the Fire Board to furnish annually to the Board the amount held at he preceding 31st December within that area, less the sum with other contributory companies under the Act. This on, however, is for assessment purposes only, the companies ged to contribute one-third of the total annual expenditure of l, the sum subscribed by each being proportionate to the net risks held within the said area. The total amount con- y the companies towards the expenses of the Board during of fires which occurred in the metropolitan district r 1897 was 449, which may be classified as follows, e damage done :—

mage	384
lamage	23
struction	42
Total	449

, there were 76 chimney fires, and 86 false alarms.

ses totally destroyed, 30 were insured, 9 not insured, and insurance was unknown. Of those in which serious ected, 21 were insured, and 2 not insured; while of der the head of slightly damaged, 164 were insured, 194 d in 26 instances the insurance was unknown; so that the total number of insurances was 215, as against 205 or 51 per cent. of the whole number for which informa- le. The percentage just given must be taken with the premises and the property therein contained fre- to different persons, and in order to gauge the extent to e is practised it would be necessary to ascertain in how the double insurance was effected. In the returns roperty is considered insured if the premises be covered s uninsured, and the converse is also the case.

; is a statement of the fires which occurred in the metro- ing the past ten years :—

	Slight damage.	Serious damage.	Total destruction.	Total fires.
	222	19	25	266
	179	17	29	225
	205	12	18	235
	216	27	19	262
	270	21	23	314
	210	23	25	258
	206	23	41	270
	299	20	48	367
	230	27	34	291
	384	23	42	449

20 of the Fire Brigades Act authority is given to sions to the country districts; but owing to an ambiguous tute the fire insurance companies do not consider them on to contribute anything towards the maintenance of rds, hence many of the municipalities have not taken me under the Act further than being gazetted. The s are served by volunteer fire companies, a return of und in the subjoined table. Full particulars, simil the metropolitan district, cannot be obtained, an operative outside Sydney and suburbs correct lable.

1898 was £6,700. The net risk in the metropolitan area held
company on the 31st December, 1897, was as follows :—

Name of Company.	Net amount at risk on 31st Dec., 1896.	Name of Company.
	£	
Aachen & Munich Fire Insurance Co.	350,546	Netherlands India Sea and Fire Insurance Co.
Alliance Assurance Company	1,816,337	New Zealand Insurance Co.
Atlas Assurance Company	423,929	North British and Mercantile Insurance Co.
Australian Alliance Assurance Co	501,640	North Queensland Insurance Co (Ltd.)
Australian Mutual Fire Insurance Co.	8,467,529	Northern Assurance Company
Batavia Sea and Fire Insurance Co.	235,700	Norwich Union Fire Insurance Societ
Caledonian Insurance Co.	473,100	Palatine Insurance Company (Ltd.
City Mutual Fire Insurance Co. (Ltd.)	3,005,188	Phœnix Assurance Co. of London
Colonial Mutual Fire Insurance Co. (Ltd.)	1,014,238	Queensland Mutual Insurance Co (Ltd.)
Commercial Union Assurance Co. (Ltd.)	6,200,329	Royal Insurance Co.
Cornwall Fire and Marine Insurance Co. (Ltd.)	258,459	Royal Exchange Assurance Corporation
Derwent and Tamar Fire and Marine Insurance Co.	236,929	Scottish Union and National Insurance Co.
Guardian Fire and Life Assurance Co. (Ltd.)	631,605	South British Fire and Marine Insurance Co. of N.Z.
Imperial Insurance Company of London (Ltd.)	1,360,875	Standard Fire and Marine Insuranc Co. of N.Z.
Lancashire Insurance Co.	294,312	Sun Insurance Office of London
Lion Fire Insurance Co. (Ltd.)	260,524	United Insurance Co. (Ltd.)
Liverpool and London and Globe Insurance Co.	2,378,508	United Australian Mutual Fire Insurance Co. (Ltd.)
London and Lancashire Fire Insurance Co.	1,045,406	Victoria Insurance Co. (Ltd.)
London Assurance Corporation	414,483	Fire Underwriters' Association o N.S.W. for Offices outside th Colony
Manchester Fire Assurance Co.	455,261	
Mercantile Mutual Insurance Co.(Ld.)	8,358,753	
National Fire and Marine Insurance Co. of N.Z.	1,179,729	Total

In cases where insurances cannot be effected in New Sou
there is an arrangement with the Fire Underwriters' Associ
which the proportionate amount of the assessment due to
Brigades Board is paid by the insured. No risks of this kin
force at the close of 1897, but at the end of 1896 the insu
local properties held outside the colony amounted to £200,26

The declared amount of risks held in the metropolitan dist
the Fire Brigades Act came into force was as undernoted. T
refer to the 31st December in each year :—

1884	£36,691,000	1891	£58,
1885	41,631,582	1892	61,
1886	46,253,370	1893	59,
1887	49,209,395	1894	59,
1888	53,583,000	1895	59,
1889	57,148,388	1896	59,
1890	58,207,183	1897	60,

number of fires which occurred in the metropolitan district
the year 1897 was 449, which may be classified as follows,
ing to the damage done :—

Slight damage	384
Serious damage	23
Total destruction	42
Total	449

ides these, there were 76 chimney fires, and 86 false alarms.
he premises totally destroyed, 30 were insured, 9 not insured, and
cases the insurance was unknown. Of those in which serious
e was effected, 21 were insured, and 2 not insured; while of
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sured, and in 26 instances the insurance was unknown ; so that
ld appear the total number of insurances was 215, as against 205
surances or 51 per cent. of the whole number for which informa-
s available. The percentage just given must be taken with
cation, as the premises and the property therein contained fre-
y belong to different persons, and in order to gauge the extent to
insurance is practised it would be necessary to ascertain in how
instances the double insurance was effected. In the returns
given a property is considered insured if the premises be covered
e contents uninsured, and the converse is also the case.
following is a statement of the fires which occurred in the metro-
area during the past ten years :—

Year.	Slight damage.	Serious damage.	Total destruction.	Total fires.
1888	222	19	25	266
1889	179	17	29	225
1890	205	12	18	235
1891	216	27	19	262
1892	270	21	23	314
1893	210	23	25	258
1894	206	23	41	270
1895	299	20	48	367
1896	230	27	34	291
1897	384	23	42	449

ler clause 20 of the Fire Brigades Act authority is given to
its provisions to the country districts ; but owing to an ambiguous
in the statute the fire insurance companies do not consider them-
called upon to contribute anything towards the maintenance of
untry Boards, hence many of the municipalities have not taken
eps to come under the Act further than being gazetted. The
y districts are served by volunteer fire companies, a return of
will be found in the subjoined table. Full particulars, similar to
given for the metropolitan district, cannot be obtained, and until
t is made operative outside Sydney and suburbs correct returns
ot be available.

The total number of firemen attached to the brigades in th politan and country districts, and the number of fires attende 1897, were as stated below :—

Name of Station.	Number of—	
	Actual fires attended.	Men in the Brigades.
Metropolitan Fire Brigade—		
No. 1, Head-quarters..	449	28
No. 2, George-st. West		11
No. 3, George-st. North		9
No. 4, Darlinghurst ...		5
No. 5, Newtown........		5
No. 6, North Sydney...		3
No. 7, Marrickville ...		5
Alexandria		4
Auxiliary Firemen......		14
Metropolitan Volunteer Companies—		
Ashfield	41	12
Balmain	29	20
Burwood	28	14
Drummoyne	6	12
Glebe	59	15
Granville............	3	19
Kogarah	8	10
Leichhardt	54	12
Manly	1	18
North Botany	26	14
Paddington No. 1	38	13
Paddington No. 2	125	15
Parramatta No. 1	7	16
Parramatta No. 2	8	19
Rockdale	18	13
Rookwood	7	14
Waterloo	35	15
Waverley	46	14
Woollahra	50	16
Country Companies—		
Adamstown	3	15
Albury	8	23
Armidale	1	12
Bathurst	8	16
Bourke	6	10
Bowral	3	20
Broken Hill	53	19
Carrington	2	25
Cootamundra	2	15
Deniliquin	4	18

Name of Station.
Country Companies—ctd.
Forbes ....
Glen Innes ....
Goulburn (2 stations)..
Grafton ....
Grafton, South ....
Hamilton ....
Hay ....
Junee ....
Kempsey ....
Lambton ....
Lambton, New .. ..
Lismore ....
Maitland, East ....
Maitland, West ....
Merewether ....
Minmi ....
Moama ....
Moss Vale............
Narrandera ....
Newcastle, City ....
Newcastle, West ......
Nowra ....
Orange ....
Parkes ....
Queanbeyan ....
Richmond ....
Singleton ....
Stockton ....
Tamworth ....
Taree ....
Tenterfield ....
Tighe's Hill and Islington No. 1 ....
Tighe's Hill and Islington No. 2 ....
Wagga Wagga ....
Wallsend & Plattsburg
Waratah ....
Wentworth ....
Wickham ....
Wollongong...... ....

LIFE ASSURANCE.

urance, in common with other forms of financial business, severe blow during the crisis of 1893, from the effects of s only now recovering. Prior to the year named all forms iness showed great expansion; during 1894 and 1895 this to a struggle to maintain the position already acquired; but in 897 a decided improvement in business was experienced. The after the financial crisis was not to be wondered at. The ppage of credit by the locking-up of deposits in banks drove he policy-holders to borrow on the security of their policies, ving was too frequently the first step towards the surrender of on the security of which the advance was made. The business half of 1893 and of the whole of 1894 was in every respect for it will be seen from the comparative tables given below g the whole of the companies together, the surrenders and actually exceeded the new business obtained. In dealing ontraction in insurance business, it should be borne in mind d many of the old policies are now falling in, and at the same eld from which new policies are obtained is sensibly narrowing, istralian colonies have been thoroughly exploited for many ile the insurable element of four and a half million people said to be large. Of late years, however, sundry new forms ce have been adopted, and the companies hope in this way adily attract the public now that a revival seems to have set

laws regulating the business of life assurance are in existence olony except New South Wales; but they are by no means o two colonies having precisely the same law. During 1862 s passed in New South Wales to encourage and protect life but its provisions in no way apply to the regulation of

unt of the absence of official returns, the particulars relating titutions are obtained from the reports published and circu- he companies themselves; but, unfortunately, such statements ow of the business transacted locally being separated from elsewhere. During 1897 there were twelve institutions in the colony. Of these, four were local, five had their head Victoria, and three in the United States. The volume of the ness of those last mentioned proportionately to the total er, so small that returns relating to the American offices omitted from the following comparisons, except where their ness can be stated. Early in 1897 two of the Victorian is amalgamated. Fourteen companies, uniting life with other insurance, have local branches or agencies, but with one their transactions in life risks in the colony are unimportant.

Of the nine Australasian institutions, the Australian Mutu
dent Society and the Mutual Life Association of Australas
incorporated under special Acts; and the City Mutual Life A
Society (Limited) and the Citizens' Life Assurance Company (
were registered under the Companies Act, the former in 1879,
latter in 1886. The five remaining institutions were incorp
Victoria.

The results of the latest published actuarial investigation
various societies were as follow:—

Institution.	Year when established.	Basis of Valuation.	Date.	Net or presen Liability
		Per cent.		£
Head Office in New South Wales—				
Australian Mutual Provident Society	1849	3½ (a)	31 Dec., 1897	14,066,65
Mutual Life Association of Australasia.	1869	4 (q)	31 Dec., 1894	963,47
City Mutual Life Assurance Society (Limited).	1879	4 (t)	31 Dec., 1897	153,68
Citizens' Life Assurance Company (Limited).	1886	3½ (a)	31 Dec., 1897	136,29
Head Office in Victoria—				
Australian Alliance Assurance Company.	1862	3½ (t)	31 Dec., 1897	273,8
National Mutual Life Association of Australasia (Limited).	1869	4 (t)	30 Sept., 1895	1,390,5
*Mutual Assurance Society of Victoria (Limited).	1870	4 (q)	31 Dec., 1895	795,17
Australian Widows' Fund Life Assurance Society (Limited).	1871	4 (q)	31 Oct., 1896	1,166,49
Colonial Mutual Life Assurance Society (Limited).	1874	4 (q)	31 Dec., 1894	1,567,43
Australasian Temperance and General Mutual Life Assurance Society (Limited).	1876	3½ (q)	30 Sept., 1895	165,4

* Amalgamated with the National Mutual Life Association from 1st January,
(a) Annual. (t) Triennial. (q) Quinquennial.

The net or present liability represents the present value of
assured in respect of whole life and endowment assurance, re
bonuses, endowments, and annuities in force at date of valua
the present value of the future pure premiums thereon. T
given represents the amount available for distribution amon
holders, and actuarial and commercial reserves.

Seven of the companies are mutual, and the remainder a
termed in insurance parlance "mixed"—that is, proprietary
dividing profits with the policy-holders; while two of the i

sact industrial business, and one company, the Australian Assurance Company, conducts fire and marine insurance. rns for each society, however, apply only to the ordinary life Most of the offices have representatives in all the seven and three institutions have extended their operations to London, also to South Africa.

llowing table gives the policies in force and the sums assured ociety at the close of 1897; the item "Sums assured" means payable, exclusive of reversionary bonuses, at death or on a certain age or at death before that age:—

Institution.	Policies in force, exclusive of Annuities.	Sums Assured, exclusive of Bonuses and Annuities.	Bonus Additions.	Total, inclusive of Bonuses.	Annual Premium Income.
	No.	£	£	£	£
lutual Provident Society	*134,034	*41,726,041	8,163,978	49,890,019	1,363,545
Association of Australasia	17,281	4,537,640	249,261	4,786,901	146,475
Life Assurance Society (Ltd.)..	7,105	958,094	29,327	987,421	34,269
Assurance Company (Ltd)	14,986	1,798,740	45,778	1,844,518	72,142
lliance Assurance Company ..	1,493	524,354	44,703	569,057	17,843
tual Life Association of Austral- l.)	43,502	9,888,494	662,297	10,550,791	326,219
Widows' Fund Life Assurance (Ltd.)	19,811	4,314,052	220,916	4,534,968	157,300
ual Life Assurance Society (Ltd.)	32,608	10,425,370	286,920	10,712,290	327,078
Temperance and General Mut- Assurance Society (Ltd.)	6,266	956,391	17,856	974,247	35,017
Life Assurance Society of the States	8,063	....	....	3,863,382	†.........
e Assurance Company of New	2,479	....	....	1,411,284	61,945
Life Insurance Company	‡ 2,932	.. ..	....	‡ 1,733,773	‡ 97,340

* Australasian business only. † Not available. ‡ Year 1896.

llowing table shows the business in force at the close of the nediately preceding that of the crisis, the year following the d at the close of 1897. As was to be expected, the volume of es decreased in nearly every society from 1892 to 1894, and the s disclosed by the figures afford another striking instance of the ad distress following the events of 1893. During 1897, most of the societies exhibited a considerable improvement business. The Mutual Assurance Society of Victoria (Limited)

was amalgamated with the National Mutual Life Association of
asia (Limited) from 1st January, 1897.

Institution.	Amount Assured, excluding and Annuities	
	1892.	1894.
	£	£
Australian Mutual Provident Society	38,888,283	39,510,130
Mutual Life Association of Australasia	4,430,669	4,166,359
City Mutual Life Assurance Society (Ltd.).	719,999	776,946
Citizens' Life Assurance Company (Ltd.)	429,084	845,984
Australian Alliance Assurance Company	769,987	645,463
National Mutual Life Association of Victoria (Ltd.).	6,479,001	6,338,659
Mutual Assurance Society of Victoria (Ltd.)	3,665,517	3,332,312
Australian Widows' Fund Life Assurance Society (Ltd.).	4,939,075	4,555,968
Colonial Mutual Life Assurance Society (Ltd.).	10,827,028	10,533,271
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	827,566	812,370
* Equitable Life Assurance Society of the United States	4,335,522	4,211,667
* Mutual Life Assurance Company of New York	1,107,258	1,253,462
* New York Life Insurance Company	1,883,765	1,665,068

* Australasian business only, including Bonuses. † Year 1896.

The following table gives a summary of the new business
during the past nine years by the nine Australian offices
New South Wales. The assurance and endowment policies only
with, as the annuity transactions are unimportant:—

Year.	Policies.	Amount Assured.		Annual Premiums.	
		Total.	Per Policy.	Total.	Per £100 of Assurance.
	No.	£	£	£	£ s. d.
1889	27,553	7,905,449	287	252,736	3 3 11
1890	28,840	8,420,670	292	274,614	3 5 3
1891	28,032	8,435,673	301	273,061	3 4 9
1892	27,965	7,977,154	285	262,647	3 5 10
1893	24,488	6,019,408	246	197,086	3 5 6
1894	25,721	6,062,494	236	202,315	3 6 9
1895	27,098	6,384,455	236	215,013	3 7 4
1896	29,611	6,895,567	233	230,896	3 7 0
1897	30,761	6,974,149	227	240,962	3 9 1

It will be noticed that the average sum assured fell to £227
while the annual premium for £100 is considerably larger
any of the other years shown. It would seem from these
that the depression of the past five years has had the effect

insuring powers of the people; while the proportionate increase emium is accounted for by the growth of the endowment business. At the present time about 55 per cent. of the total business is of this description, and it is evident that the on of investment with insurance thus afforded has obtained old on the assuring public. The average sum assured per t policy is below that of the whole life policies, while the nual premium is higher, as many of the policies are for short The new assurances effected during the year, less the void r discontinuances, represent the annual additions to the sums this, or its opposite, is shown in the following comparison for years ended 1897:—

Year.	New Assurances.	Void Business.	Net yearly increase to sums assured.
	£	£	£
1891	8,435,673	5,096,730	3,338,943
1892	7,977,154	6,099,772	1,877,382
1893	6,019,408	6,218,360	*198,952
1894	6,062,494	6,305,437	*242,943
1895	6,384,455	5,796,308	588,147
1896	6,895,567	5,501,385	1,394,182
1897	6,974,149	5,344,764	1,629,385

* Decrease.

eipts of the societies are chiefly represented by the collections iums on policies and the interest arising from investments of ulated funds; while payments on account of policies matured ndered, cash bonuses, and expenses of management chiefly the disbursements. The receipts and disbursements of each ring 1897 were as follow:—

Institution.	Receipts.	Expenditure.	Excess Receipts (Addition to Funds).
	£	£	£
Mutual Provident Society	2,080,566	1,329,527	751,039
e Association of Australasia	208,576	154,144	54,432
l Life Assurance Society (Ltd.)	41,229	20,914	20,315
fe Assurance Company (Ltd.)	70,012	25,304	44,708
Alliance Assurance Company	31,746	27,288	4,458
utual Life Association of Australasia	419,861	279,630	140,231
Widows' Fund Life Assurance (Ltd.)	211,307	162,302	49,005
utual Life Assurance Society (Ltd.)	397,012	284,643	112,369
n Temperance and General Mutual surance Society (Ltd.)	42,787	27,198	15,589
Total £	3,503,096	2,310,950	1,192,146

* Denotes decrease.

The aggregate receipts and disbursements, under the accepted for the ten institutions were as follow :—

Receipts.	£	Expenditure.	
Premiums—		Claims	
New	229,511	Surrenders	
Renewal	2,161,118	Annuities	
Consideration for Annuities..	53,803	Cash Bonuses and Dividends	
Interest	1,047,560	Expenses	
Other Receipts (Rents, etc.)..	11,104	Amount written off to Depreciation, Reserves, etc. ..	
Total........................ £	3,503,096	Total........................£	

In 1894, for the first time for many years, the amount of earned and rents received was insufficient to meet the demand the head of claims, and similar conditions prevailed during the f three years; the excess to be made good from the other however, was small.

The yearly additions to the accumulated funds are largely de on the volume of assurances current, and any changes in the reflected in the figures of the other; it is, therefore, not surpris coincident with the shrinkages in the volume of assurances in fo the year 1894, the amount added to the accumulated funds ha pondingly fallen off. During the years 1895, 1896, and 1897, h the additions to the funds have shown a considerable increas amount of funds and the interest received thereon, for the eig ended with 1897, were as follow :—

Year.	Accumulated Funds.		Interest.	
	Additions during year.	Total Amount.	Amount received.	Average Rate realised.
	£	£	£	per cent.
1890	1,404,215	14,580,210	827,909	5·97
1891	1,380,553	15,960,763	902,774	5·91
1892	1,360,100	17,320,863	967,678	5·81
1893	1,147,143	18,468,006	991,369	5·54
1894	912,276	19,380,282	1,041,529	5·50
1895	1,057,942	20,438,224	1,037,477	5·21
1896	996,045	21,434,269	1,038,993	4·96
1897	1,192,146	22,626,415	1,047,560	4·51

ASSETS AND LIABILITIES OF ASSURANCE COMPANIES.

The societies establish annually a statement of their liabili assets, with the object of showing the distribution of the accu funds and the amount placed to commercial reserve. The ret however, in no way connected with the valuation balance-she pared at the date of the actuarial investigation. The assets an for each institution, for the financial year of 1897, are shown in subjoined table :—

Institution.	Assets.			Liabilities.		
	Loans on Mortgages and Policies.	Government and Muni-cipal Securities, Free-hold Property, Cash on Deposit, etc., etc.	Total.	Assurance Endowment and Annuity Funds.	Paid-up Capital Reserve Funds, etc., etc.	Total.
	£	£	£	£	£	£
lian Mutual Provident Society	12,007,589	2,920,641	14,928,230	14,479,578	448,652	14,928,230
Life Association of Austral-a	779,360	421,046	1,200,406	1,190,193	10,213	1,200,406
utual Life Assurance Society d.)	101,968	63,256	165,224	164,200	1,024	165,224
s' Life Assurance Company d.)	98,495	59,661	158,156	155,218	2,938	158,156
alian Alliance Assurance Com-ay	255,637	296,871	552,508	284,786	267,722	552,508
al Mutual Life Association of stralasia (Ltd.)	1,805,009	937,894	2,742,903	2,703,701	39,202	2,742,903
lian Widows' Fund Life As-rance Society (Ltd.)	1,030,118	225,102	1,255,220	1,247,188	8,032	1,255,220
l Mutual Life Assurance ciety (Ltd.)	1,139,756	1,019,526	2,159,282	2,113,624	45,658	2,159,282
alasian Temperance and Gene- Mutual Life Assurance ciety (Ltd.)	142,695	92,235	234,930	198,708	36,222	234,930
Total	17,360,627	6,036,282	23,396,859	22,537,196	859,663	23,396,859

* Including Fire and Guarantee Branches. † Including Industrial Branch.

out 51 per cent. of the total assets are represented by loans on gage, and another 20 per cent. is lent on the policies of the ties. In former years insurance companies were almost restricted ese forms of investment, but recently more attention has been to Government securities, loans to municipalities, and investments ares; while considerable sums are deposited with the banks, or in freehold and leasehold property. The remaining items require ecial comment, except loans on personal security. Investments of character are unusual in Australasia, the amount invested aggregat- nly £86,962. In some of the colonies the companies are obliged by o deposit certain sums with the Treasury as a guarantee of good , and the amount so lodged is included either under the head of rnment securities or of deposits.

EXPENSES OF MANAGEMENT OF ASSURANCE COMPANIES.

e ratio of expenses of management to premium income and gross pts must necessarily vary according to the age of the society and proportion of new business transacted. The figures are given for they are worth. That a more exact comparison cannot be made is ault of certain companies which fail to make a complete disclosure of their affairs, and do not distribute their expenses of managem that the cost of new business may be distinguished from that o business ; the reports of other companies are unequalled in any p the world :—

Institution.	Expenses of Managem	
	Amount.	Proportion t
		Premium Income.
	£	per cent.
Australian Mutual Provident Society	181,579	13·51
Mutual Life Association of Australasia	41,676	27·73
City Mutual Life Assurance Society (Ltd.)	9,304	28·23
Citizens' Life Assurance Company (Ltd.)	10,502	16·24
Australian Alliance Assurance Company	4,177	21·17
National Mutual Life Association of Australasia (Ltd.)	77,652	25·74
Australian Widows' Fund Life Assurance Society (Ltd.)	37,635	25·15
Colonial Mutual Life Assurance Society (Ltd.)	79,421	25·50
Australasian Temperance and General Mutual Life Assurance Society (Ltd.)	11,888	34·72

ASSURANCE IN VARIOUS COUNTRIES.

The average amount assured per policy for each colony, and United Kingdom, Canada, and the United States, is given in t lowing table. The figures in some instances are probably som overstated as all the companies do not show complete returns business in each colony, but the results may be taken as a fair e for each province. The Australasian business of the American tutions excluded from the previous returns has been included f purpose of establishing the Australian averages shown herewith :

Country.	Average sum assured per Policy.	Average Premium per £100 of Assurance.
	£	£ s. d.
Australasia	280	3 6 5
New South Wales	318	3 3 2
Victoria	279	3 5 11
Queensland	315	3 0 8
South Australia	242	3 6 11
Western Australia	315	3 1 1
Tasmania	264	3 6 5
New Zealand	264	3 0 1
United Kingdom	397	3 7 6
United States (New York only)	502	....
Canada	347	....

The average amount of assurance per head of population v Australasia, £21 ; in Canada, £13 ; in the United Kingdom, £1

United States, £15; while the average number of policies per ad of population was, in Australasia, 74; in Canada, 37; in the Kingdom, 32; and in the United States, 30.

average policy is scarcely a fair measure of thrift. In these s mutual assurance is the rule, and members of the various s have acquired large bonus additions. The average existing including reversionary bonus, of the Australasian companies 1897, was £312, as compared with the £280 shown in the com- e table.

ould seem that the practice of assuring life is much more nt in Australasia than in any of the other countries instanced: hough the average sum assured by each policy is less, the number ies is so much greater, as compared with the population, that the t assured per inhabitant is considerably higher.

BANKRUPTCY.

present Bankruptcy Act came into force in January, 1888, super- a system which made insolvency a very easy matter. It was ed that the new Act would give a healthier tone to trade, and e the number of cases in which debtors would have recourse to be relieved of their engagements. The result anticipated, however, t immediately realised, and bankruptcies were just as numerous erly, but during the year 1896 and 1897 a decided improvement ace. In the ten years during which the present law has been in 12,406 petitions in bankruptcy have been received; of these, were filed by the bankrupts themselves, and 1,703 on behalf of rs. The petitions were not granted or were withdrawn in 441 o that the total sequestrations actually made numbered 11,965. llowing is a statement of the bankruptcy petitions for each ten years during which the present Bankruptcy Act has been e :—

r.	Petitions in Bankruptcy.			Petitions withdrawn, refused, etc.	Sequestration Orders granted.
	Voluntary.	Compulsory.	Total.		
	No.	No.	No.	No.	No.
8	735	116	851	28	823
9	935	166	1,101	39	1,062
0	1,079	164	1,243	50	1,193
1	1,016	222	1,238	49	1,189
2	1,267	239	1,506	43	1,463
3	1,535	209	1,744	59	1,685
4	1,364	148	1,512	47	1,465
5	1,080	200	1,280	61	1,219
6	937	149	1,086	46	1,040
7	755	90	845	19	826
otal...	10,703	1,703	12,406	441	11,965

It will be observed that a regular decrease in the sequestrations taken place since the financial crisis of 1893, the total for 1897 be less than one-half of that in the year first-mentioned, and only th more than the bankruptcies in the fairly prosperous year 1888. T decline confirms the evidence of the growing prosperity of the col already indicated by the increase in the savings of the people, and by the life assurance returns.

A bankrupt may obtain his discharge in one of three ways—by sequestration order made against him being annulled, by the releas his estate, or by a certificate of discharge being granted to him. bulk of the certificates issued are obtained under the last-mentioned h only three sequestration orders have been annulled, and 105 estates been released since the existing Act has been in force, while 1 certificates of discharge have been granted. The number of ce cates issued from 1st January, 1888, to 31st December, 1897, wa follows:—

Year.	Sequestration Orders annulled.	Estates released.	Certificates of Discharge granted.	Compositions accepted.	To Certific Issu
	No.	No.	No.	No.	N
1888	....	1	26	5	3
1889	....	14	114	7	12
1890	....	4	95	4	10
1891	....	3	309	....	31
1892	1	19	185	....	20
1893	....	6	152	2	16
1894	....	....	147	....	14
1895	....	12	142	....	1
1896	1	21	95	1	11
1897	1	25	66	1	
Total	3	105	1,331	20	1,4

The number of estates in respect of which certificates of dischar release were granted was 1,459, or 12 per cent. of the total sequestra In some few cases application is made for a certificate and ref allowing for these, it would appear that out of 100 bankrupts unable or too indifferent to take the necessary steps to free them from bankruptcy. Under the law the property of an uncertif bankrupt, even if acquired subsequently to sequestration, is liab

on behalf of unsatisfied creditors ; and as applications for certifi-
of discharge are the exception rather than the rule, it would
that the great majority of bankrupts neither attain nor hope
ain a position in which they are likely to be disturbed by
fied creditors. Before a certificate is granted all fees owing to
urt and official assignees must be paid, and it is certain that not
who elect to remain uncertificated do so in order to avoid payment
se fees. The number of sequestrations during the ten years
t has been in force was 11,965, and of these 10,506 remain uncer-
d. During 1897 the total number of sequestrations was 826 ;
bilities, according to bankrupts' schedules, were £610,111 ; and
sets amounted to £347,469. The qualification "according to
pts' schedules" is necessary, as the returns of assets and liabilities
hed after investigation by the Court differ widely from those
ed by bankrupts :—

Year.	Sequestrations.	Nominal—		
		Liabilities.	Assets.	Deficiency.
	No.	£	£	£
1888	823	659,307	459,677	199,630
1889	1,062	794,603	396,723	397,880
1890	1,193	1,203,685	540,726	662,959
1891	1,189	989,778	454,211	535,567
1892	1,463	2,035,316	793,045	1,242,271
1893	1,685	1,527,985	905,763	622,222
1894	1,465	1,852,235	995,935	856,300
1895	1,219	1,142,637	747,053	395,584
1896	1,040	627,314	409,928	217,386
1897	826	610,111	347,469	262,642
Total	11,965	11,442,971	6,050,530	5,392,441

dividend rates paid on the amount of proved liabilities of
which have been wound up are not given, as to establish such
involve an investigation of the transactions in each estate ; and
his operation would not result in complete returns being
hed, as there are many estates which remain unsettled over a
eriod of years. There are three official assignees to assist the

Court in winding up the estates. Each official pays all money re
by him to the Registrar in Bankruptcy, who places the amount t
credit of the Bankruptcy Estates Account, from which all ch
fees, and dividends are met. The official assignees are also requi
furnish quarterly statements of the transactions in each estate
that period, and the figures given in the two statements followin
obtained from these returns. The charges under each head were

Year.	Peremptory Charges.		Legal Costs.	Paid into Consolidated Revenue.		Commissio to Official Assignees.
	Auction.	Rent, Valuation, Labour, etc.		Court Fees.	Percentage.	
	£	£	£	£	£	£
1890	4,268	9,613	3,064	70	382	3,443
1891	3,019	18,439	6,202	1,508	726	5,386
1892	3,692	10,350	7,192	1,582	891	5,581
1893	3,952	13,743	7,133	1,473	652	5,691
1894	3,571	18,308	7,139	1,528	1,143	8,610
1895	2,780	16,752	8,519	1,414	718	6,182
1896	1,955	22,488	6,113	1,321	551	4,665
1897	1,617	13,929	8,100	1,293	691	5,129

The official assignees receive 2½ per cent. on the amount reali
a similar rate on the amount of dividends declared; in add
this the Judge may grant special remuneration. The divider
and the undivided balances at the end of each year were as foll

Year.	Dividends Paid.	Money in hands of Official Assignees.		Balance o Bankrupt Estates Acco
		Unpaid and unclaimed Balances.	Unpaid Dividends.	
	£	£	£	£
1890	26,289	1,987	287	22,037
1891	52,304	1,449	432	21,651
1892	45,084	1,145	591	20,284
1893	40,433	9,532	132	27,287
1894	70,381	863	305	30,985
1895	50,640	314	530	16,738
1896	31,557	9,610	747	23,553
1897	37,900	1,474	1,065	13,208

On the 30th June, 1898, there remained to the credit of th
ruptcy Unclaimed Dividend Fund £6,892, and to the Ba
Suitors Fund, to which account interest earned by the U
Dividend Fund is placed, the sum of £620.

:t Registrars in Bankruptcy have been appointed throughout ıy, and in most instances the positions are filled by Police tes or other court officials. District Registrars have the same nd jurisdiction as the Registrar in respect to examinations of s, and the technical business of the court.

llowing table gives the callings of persons becoming bankrupt 397 ; no trade, however, is recorded which showed less than upts :—

ling.	No.	Calling.	No.	Calling.	No.
....	140	Contractors	18	Bakers	10
....	135	Butchers	15	Others (under 10 Sequestrations)	316
....	38	Carpenters	13		
rs	38	Clerks	13		
....	19	No occupation	12	Total	826
....	19	Graziers	11		
s............	19	Civil Servants..........	10		

regoing pages deal with the commercial aspect of bankruptcy ; formation relating to legal procedure will be found in the lealing with the transactions of the Law Courts.

TRANSACTIONS IN REAL ESTATE.

Ɩeal Property Act came into force in 1862, dealings in real efore that year having been regulated by the Deeds Regis- Act of 1843. The Real Property Act completely revolutionised edure in regard to land transfers, and was modelled on the egislation in South Australia adopted at the instance of Sir ›rrens—hence the popular name of Torrens' Act. The chief of the Act are the transferring of real property by registration ıstead of by deeds ; the absolute indefeasibility of the title when d ; and the protection afforded to owners against possessory s a title issued under the Act stands good notwithstanding any f adverse possession. From the passing of Torrens' Act all ld by the Crown were conveyed to the purchasers under its ıs, and the provisions of the old law were restricted to transac- respect of grants already issued. The area for which grants e old system had been issued in 1862 was 7,478,794 acres ; n 1,253,003 acres have been brought under the provisions of Act, so that the area still under the Deeds Registration Act is

6,225,791 acres. Lands are allowed to be placed under Torrens' only when their titles are found to be unchallengeable; but thousand acres are brought under the Act during the course of every year, so it is merely a question of time when the whole of the lands of colony will be under a uniform system. The area of Crown l conveyed and of private lands brought under the Real Property during the decade ended 1897 was as follows :—

Year.	Crown Lands conveyed under the Act.		Private Lands brought under the Real Property Act.		Total	
	Area.	Value.	Area.	Value.	Area.	Val
	acres.	£	acres.	£	acres.	
1888	318,875	421,058	62,085	1,840,008	380,960	2,2
1889	355,330	512,237	45,309	1,348,812	400,639	1,8
1890	194,953	336,369	79,675	1,068,348	274,628	1,4
1891	279,247	403,421	51,145	1,163,044	330,392	1,5
1892	189,990	301,165	83,627	1,243,890	273,617	1,5
1893	253,941	306,842	44,999	962,413	298,940	1,2
1894	267,730	485,006	45,756	808,234	313,486	1,2
1895	289,157	261,262	22,230	755,114	311,387	1,0
1896	320,474	226,440	53,717	861,811	374,191	1,0
1897	268,014	161,694	26,941	617,984	294,955	

For the whole period during which the Real Property Act (To has been in operation, 17,531,643 acres, valued at £19,776,339 been conveyed under its provisions, and 1,253,003 acres, val £21,080,856, have been brought under it, and deeds under the o to the same extent cancelled.

The transfers and conveyances of private lands which take during ordinary years indicate in some measure the condition of bu the volume of these transactions, however, in some years cannot be upon as giving more than an indication of speculation or inflatio the following table, which covers ten years, there is shown the con tion money paid on sales of private lands during each year, exc of course, lands sold on long terms. During 1888 land to the v £11,068,873 changed hands, but in 1897 the amount had fal £3,251,379. The year 1888 marked the last flickering of the hen land speculation proceeded on a scale of unexampled reck- The other extreme was reached in 1897, when the value of the nsferred was only slightly more than in 1877, and nearly 00 less than in 1896. It is evident, therefore, that transactions still very largely represent conveyances by mortgagors and es, genuine speculation in land having almost wholly died

Year.	Conveyances or Transfers.		
	Under Old System.	Under New System.	Total.
	£	£	£
1888	5,893,373	5,175,500	11,068,873
1889	4,169,822	3,333,411	7,503,233
1890	3,954,358	3,600,392	7,554,750
1891	4,564,285	3,602,082	8,166,367
1892	3,537,829	2,716,379	6,254,208
1893	2,317,777	2,532,211	4,849,988
1894	1,945,527	2,048,977	3,994,504
1895	1,812,199	1,862,638	3,674,837
1896	2,212,158	2,009,172	4,221,330
1897	1,149,989	2,101,390	3,251,379

ady mentioned, the Real Property Act provides that on the certificate the title of the person named on the certificate is le. Provision is, however, made for error in transfer, by which night be deprived of their rightful property, as should the be made to the wrong person the holder of the certificate dispossessed of his property unless he has acted fraudulently. nify the Government for compensating persons who, through y have been deprived of their properties, an assurance fund created by a contribution of one halfpenny in the pound on ed capital value being levied on property first brought under nd upon transmissions of titles of estates of deceased proprietors. ndeniable proof of the value of the Act, and the facility of its that payments from the assurance fund to the 31st December, espect of titles improperly granted, amounted to only £3,148.

The amounts paid into the Treasury on account of the assuranc during each of the seven years ended 1897 were as follow:—

Year.	Collections, less Refunds.	Compensation and Cost of Legal Actions.	Amounts Credited to Fund.
	£	£	£
1891	5,345	Nil	5,345
1892	4,670	1,053	3,617
1893	4,083	Nil	4,083
1894	4,882	367	4,515
1895	4,276	1	4,275
1896	3,912	12	3,900
1897	4,721	35	4,686

The assurance fund, which forms part of the Trust Fund Treasury, amounted to £161,576 at the close of 1897, and bears at rates varying from 3 to 5 per cent. The accretions to this fun is, interest and collections—average over £8,000 per annum. total withdrawals during the whole currency of the Act have only a little over £3,000; thus, as there is every likelihood of the annually added growing larger as years roll on, the fund bid attain considerable dimensions.

MORTGAGES.

All mortgages, except those regulated by the Bills of Sale 1855 and the Merchant Shipping Act of 1894, are registere Registrar-General's Office, and it is a fair assumption that the recorded represents the bulk of the mortgages effected. Whe than one mortgage has been effected on the same property, the m take priority according to the time of registration, and not in ac with their respective dates. The amount of consideration for mortgage stands as security is not always stated in the deeds, t "valuable consideration" or "cash credit" being inserted inste specific sum in many of the transactions of banks and other loar tions, in cases where the advances made are liable to fluctuati as this frequently occurs when the property mortgaged is of gre an exact statement of the total advances against mortgages c given. It must be borne in mind, therefore, that the figure tables given below refer only to cases in which a specific ar stated in the deeds, whether that amount be the sum actually or not. What is true of mortgages registered holds good for di the amount of which, as shown in the tables, is still further re the exclusion of mortgages which have been satisfied by forec seizure, a record of which is not available. Many mortgages, t appear in the official records as current, notwithstanding property which they represent has passed away from the mortg

MORTGAGES OF REAL ESTATE.

gages of land are registered either under the Deeds Registration 1843 or the Real Property Act of 1862, according to the Act vhich the title of the property stood at the time of registration.

ortgages registered for each of the ten years ended 1897

-

	Registrations—					
	Under Deeds Registration Act.		Under Real Property Act.		Under both Acts.	
	Number.	Consideration.	Number.	Consideration.	Number.	Consideration.
		£		£		£
	7,452	8,765,109	4,274	7,520,914	11,726	16,286,023
	9,312	7,277,334	4,416	7,256,931	13,728	14,534,265
	9,883	8,072,218	4,697	8,559,662	14,580	16,631,880
	10,348	10,520,261	4,523	8,535,876	14,871	19,056,137
	10,450	9,328,563	4,644	6,770,594	15,094	16,099,157
	9,351	7,434,029	4,704	6,034,324	14,055	13,468,353
	8,901	5,824,797	4,277	5,624,968	13,178	11,449,765
	8,467	7,183,729	3,886	4,741,877	12,353	11,925,606
	7,855	5,428,148	3,677	4,652,779	11,532	10,080,927
	3,898	4,147,583	3,571	4,354,412	7,469	8,501,995

onsideration given generally represents the principal owing; in ases, however, it stands for the limit within which clients of nd other loan institutions are entitled to draw, though many e clients may be in credit while their property is mortgaged and sed.

amount of mortgages discharged has always been much less than ount registered, for, as previously mentioned, the discharges do lude foreclosures, which if not formally registered as discharges ertheless mortgages cancelled. The volume of the releases is duced by mortgages paid off in instalments, as the discharges given for the last sum paid, which might happen to bear a very roportion to the total sum borrowed; and, further, the total of ges is reduced owing to the practice, now largely followed, of g mortgages maturing on fixed dates to be extended for an te period.

eyances under mortgage or purchases of equity of redemption, nsfers which represent dealings between mortgagee and mortgagee,

are, in point of value, unimportant ; nevertheless, to compl
transactions in mortgages, returns covering the period of te
ended 1897 are given below. The table is incomplete, as t
sideration in respect of conveyances and transfers under th
Property Act cannot be given ; while the figures for 1897 are e
of 24 conveyances under mortgage, and 118 transfers of mortga
which the amounts involved are not stated :—

Year.	Deeds Registration Act of 1843.			
	Conveyances under Mortgage.		Transfers of Mortgages.	
	Number.	Consideration.	Number.	Consideration.
		£		£
1888	192	378,662	276	829,753
1889	204	680,240	83	38,690
1890	117	88,116	210	229,010
1891	348	245,111	246	390,243
1892	392	162,307	253	1,219,401
1893	430	216,925	383	276,507
1894	374	381,738	508	485,489
1895	320	159,608	600	768,368
1896	467	256,967	370	287,361
1897	450	280,583	146	174,379

MORTGAGES ON LIVE STOCK AND WOOL.

Liens on wool, mortgages on live stock, and liens on growi
are registered under special Acts, the two first mentioned
temporary measure passed in 1847, which was continued from
time and became permanent by a special enactment in 1860,
liens on growing crops under one passed in 1862. The mor
live stock are current till discharge, while the liens on wool r
the end of each season and terminate without being formally di
Mortgages under each Act are valid without the stock or cr
delivered to the mortgagees. The figures relating to live
given in some detail, as they throw considerable light on the
of the great industry of the country. They must, however,
with this qualification, that the amount stated represents in m
merely nominal indebtedness, and the advances are not in every
made to persons financially embarrassed. But with full allo

score, the figures given hereunder will make it plain how large a the lending institutions have upon the great pastoral industry. following statement shows the liens on wool and the mortgages on stock registered during each of the ten years ended 1897. Sums red both by a lien on the wool and by mortgage of the sheep, are uded under the head of mortgages only :—

Preferable Liens on Wool.			Mortgages on Live Stock.				
Number.	No. of Sheep.	Consideration.	Number.	No. of Sheep.	No. Horned Cattle.	No. of Horses.	Consideration.
		£					£
1,174	9,800,520	1,282,125	1,998	4,002,148	80,120	12,364	2,003,216
1,169	7,861,233	1,282,065	2,018	4,572,477	100,026	11,824	2,432,704
1,461	9,005,582	1,562,270	2,230	4,962,300	93,298	12,543	3,159,636
1,701	10,201,412	1,320,823	2,328	6,896,947	111,432	16,728	2,632,758
2,051	12,094,876	1,688,661	2,326	5,966,971	142,695	16,904	2,814,637
2,257	13,204,407	1,935,660	2,270	8,357,014	227,531	24,241	*3,176,725
2,627	16,084,929	1,952,451	2,167	6,586,711	698,448	18,016	*2,059,381
2,509	14,689,647	2,101,048	1,901	4,983,071	148,629	18,292	2,254,290
2,364	11,309,327	1,341,949	1,768	4,748,695	93,550	24,520	1,705,245
2,183	9,277,004	1,056,721	1,678	4,290,304	62,644	13,474	1,418,884

The figures for 1893 and 1894 include the consideration for 245 and 22 camels respectively.

supplement the information just given, the following table, which s the proportion of the flocks of the colony covered by lien and gage, has been compiled. In addition to the numbers given, a iderable quantity of stock is in the hands of financial institutions ortgagees in possession, but an exact statement of this it is not ible to obtain :—

Sheep.			Horned Cattle.			Horses.		
Total in Colony.	Involved in Lien and Mortgage.	Proportion involved to total flocks.	Total in Colony.	Involved in Mortgage.	Proportion involved to total herds.	Total in Colony.	Involved in Mortgage.	Proportion involved to total number.
No.	No.	per cent.	No.	No.	per cent.	No.	No.	per cent.
46,503,469	13,802,668	29·7	1,622,907	80,120	4·9	411,368	12,364	3·0
50,106,768	12,433,710	24·8	1,741,592	100,026	5·7	430,777	11,824	2·7
55,986,431	13,967,882	24·9	2,091,229	93,298	4·5	444,163	12,543	2·8
61,831,416	17,098,359	27·7	2,128,838	111,432	5·2	460,647	16,728	3·6
58,080,114	18,061,847	31·1	2,221,459	142,695	6·4	484,309	16,904	3·5
56,980,688	21,561,421	37·8	2,269,852	227,531	10·0	493,231	24,241	4·9
56,977,270	22,671,640	39·8	2,465,411	698,448	28·3	518,181	18,016	3·5
47,617,687	19,672,718	41·3	2,150,057	148,629	6·9	487,943	18,292	3·7
48,318,790	16,058,022	33·2	2,226,163	93,550	4·2	510,636	24,520	4·8
43,952,897	13,567,308	30·9	2,085,096	62,644	3·0	498,034	13,474	2·7

ie mortgages shown represent the annual registrations: hence the p involved were those pledged during twelve months only; and as currency of a mortgage on live stock, unlike that of a lien which inates at the end of the season, is variable, it follows that the figures in any year do not represent the total number of sheep cov by mortgage, and that the proportion of the flocks held under lien mortgage, after making every allowance for releases, is therefore so what higher than that stated. This remark applies equally to t figures given for horned cattle and horses.

DISCHARGES OF MORTGAGES.

The number of discharges registered amounts in an ordinary year about one-sixth of the mortgages of live stock registered. The figu for the ten years ended 1897 were :—

Year.	Number.	Amount.	Year.	Number.	Amount.
		£			£
1888	240	1,160,307	1893	286	1,062,827
1889	256	1,191,089	1894	334	496,041
1890	368	2,512,551	1895	372	1,053,863
1891	380	1,184,372	1896	432	886,218
1892	317	985,048	1897	385	549,064

There were also 42 discharges of liens, amounting to £20,683 dur 1897 ; these represent transfers of security and repayments during season, as liens terminate by effluxion of time at the close of the w season.

LIENS ON GROWING CROPS.

Under the provisions of the Act, liens on agricultural and horti tural produce, the duration of which must not exceed one year, made. Such advances do not ordinarily reach large sums, either i vidually or in their total, as there is an element of uncertainty in security offered. During the last ten years the advances ranged f £75,439 to £247,466 per annum. The liens registered in 1897 w 1,947 in number, covering advances to the extent of £151,334 :—

Year.	Number.	Consideration.	Year.	Number.	Consideration.
		£			£
1888	1,006	247,466	1893	1,789	159,007
1889	1,227	83,748	1894	2,291	181,432
1890	1,089	75,439	1895	2,621	219,392
1891	1,171	78,448	1896	2,567	202,605
1892	1,416	130,155	1897	1,947	151,334

MORTGAGES ON SHIPS.

Mortgages of registered British vessels are dealt with under Merchant Shipping Act of 1894. The mortgages are, according to Act, divided into two classes, one in which the ship is the sole secu e other in which the advances are made on the security of what ed in the Act "the account current," which may comprise ships, ge appliances, etc. Registrations are effected at the two ports of y, Sydney and Newcastle; the returns given in the subjoined ents apply to both ports :—

	Mortgage on ships only.				Mortgage on account current.			
	Sailing Vessels.		Steam Vessels.		Sailing Vessels.		Steam Vessels.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
		£		£		£		£
1	37	22,377	7	3,022	4	3,672	8	8,800
2	36	18,571	9	16,835	19	51,293	6	10,000
3	23	13,152	10	6,681	12	315	15	3,019
4	34	11,420	21	13,577	4	1,855	7	16,600
5	24	9,790	9	4,617	9	900	15	19,730
6	18	6,165	18	19,630	9	5,450	4	7,250
7	21	7,745	23	22,917	2	1,509	12	12,934

number of mortgages registered in which ships figure as the sole y represents the vessels encumbered—that is to say, "one ship one ge"; the number of mortgages in the other class may or may not nt the number of vessels mortgaged. The discharges of mortluring the same period were as follow :—

Mortgage on ships only.				Mortgage on account current.			
Sailing Vessels.		Steam Vessels.		Sailing Vessels.		Steam Vessels.	
No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
	£		£		£		£
17	12,482	10	9,004	3	No amount	7	12,400
23	9,769	7	3,872	6	2,717	2	872
20	13,962	5	13,026	1	No amount	2	90
13	5,948	12	10,325	1	do	nil.	nil.
28	11,096	7	8,664	6	216	8	1,000
15	5,230	9	13,553	2	501	2	150
11	3,193	18	16,643	4	840	7	4,800

ome cases of mortgages on account current the amount of conion is not stated, and the figures given must be accepted with this ation.

BILLS OF SALE.

All mortgages of personalty other than ships and shipping appli wool, live stock, and growing crops, are filed and entered at the Su Court under the Bills of Sale Act of 1855. This Act provides tha document shall be filed and entered within thirty days after it is or given, otherwise the transaction is illegal; and to prevent fra imposition the records are open to the inspection of the public. total amount of advances annually made on bills of sale is not r available, but judging from the number of bills filed the sum m considerable. The provisions of the Act are availed of by all cla the community, but brewers and money lenders figure conspic among the transferrees. No complete record is made of th terminated voluntarily or by seizure, the official records showin those discharged in the ordinary way. Seizures of the security which generally comprises household furniture and stock-in-tra common occurrences, and it is to be regretted that no record o is kept; but, as previously shown, the neglect in the registrat foreclosures is a weakness in the procedure under all Acts regu mortgage transactions. The bills filed and the discharges registe the eight years ended 1897 were as follow :—

Year.	Bills of Sale.	
	Filed in Supreme Court.	Satisfied or orders for discharge made.
1890	3,045	221
1891	2,697	136
1892	2,776	132
1893	3,111	96
1894	2,752	77
1895	2,512	140
1896	2,375	158
1897	3,368	156

SUMMARY OF MORTGAGES.

The volume of mortgages registered and discharged under eac is given below. As the returns are incomplete, from causes a alluded to, no general total has been established. The followin the total consideration of the mortgages registered during each e last five years:—

Property.	1893.	1894.	1895.	1896.	1897
l Estate—	£	£	£	£	£
der Deeds Registration Act	7,484,029	5,824,797	7,183,729	5,428,148	4,147,583
,, Real Property Act..........	6,034,324	5,624,968	4,741,877	4,652,779	4,354,412
sonalty—					
ns on Wool	1,935,660	1,952,451	2,101,048	1,341,949	1,056,721
rtgages on Live Stock	3,176,726	2,059,321	2,254,290	1,705,245	1,418,884
ns on Growing Crops	159,007	181,432	219,392	202,605	151,334
rtgages on Ships	19,833	24,997	14,407	25,795	30,662
,, ,, and Shipping Appliances	*3,334	18,455	*20,630	*12,700	14,443
ls of Sale	Not available.				

* Figures incomplete.

e consideration of the mortgages of which discharges were regisduring each of the last five years is given below:—

Property.	1893.	1894.	1895.	1896.	1897.
l Estate..	£	£	£	£	£
der Deeds Registration Act	1,864,021	2,060,696	2,505,730	3,106,861	2,108,981
,, Real Property Act..........	1,927,794	2,083,002	2,715,443	2,798,795	2,680,520
sonalty—					
ns on Wool	At end of each Season.				
rtgages on Live Stock	1,062,827	496,041	1,053,863	886,218	549,064
ns on Growing Crops	At end of each Season.				
rtgages on Ships	26,988	16,273	19,760	18,788	19,836
,, ,, and Shipping Appliances	*90	......	*1,216	651	5,640
ls of Sale	Not available.				

* Figures incomplete.

FRIENDLY SOCIETIES.

e position occupied by Friendly Societies at the present day is a important one, on account of the strong influence which they exert e welfare of the industrial classes of the population; and recognising ervices which they render to the community by the inculcation of s of thrift, and the relief of cases of distress which it would other- be the duty of the public to alleviate, the State, while forbidding arrying on of operations by an unregistered society, and imposing a lty on each member of its committee should it accept money in deration of any interest therein, grants certain privileges to societies sentation or imposition ;

(*b*) Having possession of any of its or misapplies it ;

(*c*) Wilfully applies any part of su poses other than those expresse rules and authorised by the Act.

3. If an officer of the Society dies or becomes ba or if an execution is issued against him wh property of the Society in his possession b the trustees of the Society are entitled to or property in preference to any other cre

4. The documents of the Society are free from

5. The Society can admit members under tw from them binding receipts, which would effect.

6. If it invests money on mortgage, such mo charged by a mere endorsed receipt withou

7. Its officers are legally bound to render acc money or property in their possession o and may be compelled to do so.

8. Disputes can be legally settled according t rules.

9. Members of registered Friendly Societies h legally insuring money, on the deaths children, for their funeral expenses, witho able interest in their lives.

10. Members of registered Societies may dispo payable by the Society by written nominat

Most of the Friendly Societies operating in New South Wales were
unded by old members of English orders who had emigrated to
ustralia before the light of public investigation had been thrown upon
e business of the societies in Great Britain, and an exposure made of
e unscientific principles on which they were being conducted. Accord-
gly, the societies established in this colony were from the commence-
ent worked under a fallacious system, which was regarded as perfect;
d as soon as it was discovered that there was an accumulation of funds,
e members looked upon the money as their personal property—in
ct, as profit derived from their exertions. They argued that any
obable change from the existing satisfactory condition of affairs would
fully compensated for by the introduction of younger members, who
their turn would be satisfied with the present, and trust to others in
e future; and any proposal for the application to their affairs of the
entific principles which governed the operations of friendly societies
ewhere was strenuously opposed as unnecessary until very recently,
en many leading members were induced, owing to the rapid depletion
the funds of their orders, to give serious consideration to their
sition.

One of the principal causes which raised this false feeling of security
s that in times of general prosperity many employers paid good
rkmen their wages during short periods of sickness in order to retain
eir services, and members in receipt of high wages and in tolerably
sy circumstances did not feel the necessity of accepting assistance
om their lodges. Also, it must be borne in mind that in those years
e members were young, and even if all claims had been preferred it
probable that the benefits would not have amounted to a large sum,
that the funds of the societies could not do otherwise than increase
spite of the inadequate scale of contributions charged. An exami-
tion of the records of the registration of amended rules shows what
e accumulation of capital led to: in many cases the members of a
ciety thought it right not only to lower their contributions, but at the
me time to increase the benefits given. The inevitable results have
ppened: the members have grown older, the claims on account of
kness and death have increased, and the depression in trade has
mpelled those out of employment to come upon the funds whenever
ssible, so that many of the societies now existing are in a state of
solvency.

As has already been stated, now that the fallacy underlying the old
stem of conducting the affairs of the societies has been so forcibly
ploded, some attempt is being generally made to place affairs on a
und basis, but even now the steps taken by many of the older members
e halting and uncertain; they concede that an error of judgment was
mmitted in the past, but are unwilling to tax themselves to any
nsiderable extent for the purpose of placing matters upon a better
oting. At the same time they are convinced that no new members
ould be admitted unless they pay according to a properly-adju

scale of contributions. It is the intention of the Government to int a Bill under which the societies may be brought into a more satis position than they occupy at the present time.

A list of the principal societies is given below, from which it seen that at the end of 1897 there were in existence 16 leading (some of them subdivided into districts, provinces, or grand div comprising 791 distinct subordinate branches; and 26 indep societies:—

Name of Orders or Societies.	Lodges or Branches.	Members.	Members good on books.	Amount of Lodge or Branch Funds.	Amount of District or Grand Lodge Funds.
	No.	No.	No.	£	£
Manchester Unity I.O.O.F.—					
Sydney District	69	9,910	9,495	98,824	29,413
Cumberland District	8	602	573	2,077	1,172
Hunter River District	7	633	600	7,461	2,336
Goulburn District	9	862	756	6,262	9,016
Newcastle District	10	1,201	1,156	2,922	7,438
Bathurst District	23	1,565	1,429	14,264	7,583
Tamworth District	17	1,850	1,693	21,324	9,686
Riverina District	7	790	761	5,048	3,417
Braidwood District	2	214	196	913	1,876
Young District	4	575	468	2,445	1,425
Wagga Wagga District	3	602	573	6,878	79
Grand United O.O.F.—					
Sydney District	43	4,626	4,192	20,884	10,774
Braidwood District	21	1,098	933	6,550	7,284
Manning River District	6	203	186	1,190	952
Newcastle District	3	304	272	2,094	392
Hunter River District	25	1,830	1,714	10,524	2,744
Bathurst District	6	479	383	2,416	1,807
Goulburn District	10	641	543	3,582	1,777
Williams River District	6	245	232	2,475	460
Committee of Management	..	....	....	....	225
Widow and Orphans' Fund in the Hunter River District.	..	....	....	....	652
Independent O.O.F.	65	5,016	4,438	23,806	18,078
National Independent O.O.F.	6	711	610	1,490	671
Ancient Order of Foresters—					
Sydney District	45	3,940	3,611	15,308	9,049
New England District	4	246	211	315	258
Neutral Courts	7	1,013	967	9,285	....
Order of Royal Foresters	25	1,823	1,711	10,679	15,273
Irish National Foresters	5	284	235	858	239
United Ancient Order of Druids—					
Sydney District	49	5,167	4,724	12,643	8,063
Newcastle District	11	1,029	961	4,897	3,111
Grand United Order of Free Gardeners.	29	1,704	1,571	3,937	560
Independent Order of Rechabites	41	1,770	1,598	1,550	9,768
Sons and Daughters of Temperance	74	3,272	2,888	20,710	2,077
Protestant Alliance Friendly Society of Australasia.	59	6,213	5,609	34,042	18,434
Loyal Protestant Benefit Society	21	816	732	1,937	1,280
Hibernian Australasian Benefit Society.	40	1,982	1,690	5,683	5,316
Australasian Holy Catholic Guild.	29	1,495	1,326	10,719	6,027
Australian Oddfellows' Union	2	668	647	2,475	....
Miscellaneous Societies	26	3,745	3,390	14,076	....
Total	817	69,124	63,074	398,562	197,[illegible]

The number of members admitted during 1897 was 8,548; while 8,593 were lost from all causes. The total cases of sickness came to 11,054, and the average amount of sick pay was £5 2s. 4d. per member. The total receipts were £252,865, and the expenditure amounted to £218,991; while the total funds were £596,464, as shown above, or £8 12s. 7d. per member enrolled.

The benefits promised by Friendly Societies are, in kind, much the same in all societies, and usually comprise medical attendance and medicine for a member and his family, sick pay—generally £1 per week for the first six months, reduced thereafter to 15s. or 10s.; allowance in the event of the death of a member's wife, and funeral money to his wife on the death of a member. The Act limits the amount payable on the death of a member to £200, and no annuity can be granted above £50, but there is no limit to the amount of sick pay, although the rules of some societies limit the total amount receivable weekly to 42s., nor to the number of societies to which one person may belong, and from which he may receive benefits, but the combined benefits must not exceed the above-mentioned amounts.

In addition to the Friendly Societies properly so called, some of the registered Trade Unions give benefits analogous to those of the societies mentioned above. The benefits, however, are usually smaller in amount, seldom exceeding 12s. a week for sick pay, and £7 in case of death. A few Trade Unions also make allowance to their members when they are out of employment.

FOOD COST OF LIVING, AND PRICES.

Food Supply.

THE soil of New South Wales is capable of producing in abu
most of the things essential for the sustenance of huma
though the production of some of these necessaries has been
entirely neglected, while others are obtained in quantities insu
for the wants of the community. Considering the comparative
rate of wages which prevails, food of all kinds is fairly chea
articles of diet which in other countries are almost within the c
of luxuries are in New South Wales largely consumed even
poorest classes.

The cost of providing food, and beverages other than into
consumed in the colony during the year 1897 may be set d
£18,654,000. This sum represents the price to the consumer, and
all charges except that of cooking and preparing the food for th
The expenditure on wines, spirits, and beer amounted to £4,086
that the total expenditure for all food and beverages was £22,7
equal to £17 7s. 0d. per inhabitant, or 11·4d. daily. Excluding
cants, the yearly expenditure per inhabitant was £14 4s. 8d.,
average per day, 9·4d. Compared with the cost of food su
other countries, this sum will not appear considerable, especiall
allowance is made for the profusion with which flesh meat is co
and wasted in New South Wales. The following figures are tak
Mulhall's *Dictionary of Statistics*, and show the annual expendit
head of the more important European countries and of the United
and Canada :—

Country.	Per Inhabitant.			Country.	Per Inhabitant.		
	£	s.	d.		£	s.	d.
United Kingdom ...	14	4	9	Norway..............	9	15	0
France	12	4	5	Denmark	11	14	0
Germany	10	18	5	Holland...............	10	8	0
Russia..................	5	19	7	Belgium	12	3	1
Austria	7	17	4	Switzerland	8	11	7
Italy	6	4	10	Roumania...........	6	10	0
Spain	8	9	0	Servia	6	10	0
Portugal..............	7	3	0	United States	9	17	7
Sweden	9	18	11	Canada	8	9	0

here has been a falling off in the value of the articles of food con-
ed in New South Wales during the last few years, due both to a
ease in the quantities consumed and to a fall in prices. As late
892 the value of food and beverages consumed amounted to 12½d.
head daily, or exclusive of intoxicants, to 10d.; while in 1897 these
unts had fallen to 11½d. and 9½d. respectively.

ie main articles of consumption in the colony are meat and bread,
retail value of which equals about 42 per cent. of the total expendi-
on food. The following is the approximate retail cost of the chief
les which enter into daily consumption :—

	£
Bread	2,906,000
Fresh meat	4,986,000
Vegetables and fruits	2,110,000
Milk, butter, cheese, etc.	3,315,000
Other farm produce	1,113,000
Sugar	1,540,000
Tea, coffee, etc.	736,000
Other foods and non-alcoholic beverages	1,948,000
Total expenditure on food	18,654,000
Wines, beer, and spirituous liquors	4,086,000
Total expenditure on food and beverages	£22,740,000

ie quantities of the principal articles of diet annually required by
member of the community are estimated to be as follow :—

Flour			244·0 lb.
Oatmeal			8·0 „
Rice			10·3 „
Meat	Beef	157·0 lb.	281·5 „
	Mutton	111·6 „	
	Pork, &c.	12·9 „	
Potatoes			202·8 „
Sugar			95·9 „
Butter			17·7 „
Cheese			3·8 „
Tea			7·8 „
Coffee			8·0 oz.
Cocoa and chocolate			8·7 „

For the year 1899 the total demand of the colony for th a
classes of food will be approximately :—

Flour		165,500	tons.
Oatmeal		5,000	,,
Rice		6,300	,,
Meat	Beef	95,100	,,
	Mutton	67,600	,,
	Pork and bacon	7,800	,,
Potatoes		122,800	,,
Sugar		58,100	,,
Butter		10,700	,,
Cheese		2,300	,,
Tea		10,584,600	lb.
Coffee		678,500	,,
Cocoa and chocolate		737,900	,,

The production of wheat in the colony at an average harvest w
now be more than equal to the demands of the population. Bas
the consumption of 1897 of 6·1 bushels per head, the demand of 1
exclusive of seed, will be about 8,277,000 bushels, the requirement
seed thus rendering neccessary an importation of at least 1,500
bushels.

Oatmeal and rice are the only other articles of cereal produce la
consumed. Rice is not grown to any extent in the colony, and
quantity required is imported either directly or indirectly from C
and India. The land adapted for the growth of this plant in
South Wales is not very extensive in area, and is probably put to b
use. Oatmeal, though manufactured in the colony, is also la
imported.

In the matter of meat supply the colony is almost independe
external assistance. The consumption of fresh meat of all kin
extremely great, and, though possibly less than in the neighbo
colony of Queensland, it exceeds per head that of any other co
The requirements of the colony for food alone amounted in 18
338,330 head of cattle, and 3,347,006 head of sheep; and though
supply of cattle sufficient to meet the demand was beyond the reso
of the colony, the number of sheep available for market very la
exceeded even the number given above, and were it not that
is preferred to mutton, no stock need have been imported
slaughtering.

The swine slaughtered for food during 1897 numbered 86,547.
quantity of bacon and hams made, according to the returns colle
was 6,544,781 lb., and the quantity imported for local requirem
during the year was 1,616,220 lb. The annual consumption per he
pork and its manufactured products, averages about 12·9 lb.

The amount of potatoes imported for local consumption during
was 52,962 tons, while the quantity available from the fields of

ony, after allowing for seed, was 51,136 tons. The net imports ounted, therefore, to 50 per cent. of the total consumption, as mpared with 44 per cent. in 1896; and 37 per cent. in 1895.

The consumption of sugar in the colony is enormous, averaging about 9 lb. per head during each year. The fields of the colony produced ring 1897 about 34,905 tons, or 27,535 tons short of the local mand, the bulk of which was imported from Queensland. As inted out in the pages relating to agriculture, a large part of the lony is well adapted to the growth of sugar-cane; but the low price hich sugar brought some few years ago, when the market was affected the bounties given by Germany and France, made the industry profitable, and the cultivation of cane was, to some extent, neglected. e considerable rise in the price of sugar during 1889 led to an increase cultivation over that of the previous year, and this was followed by ther extensions until during the two seasons 1895-96 and 1896-97 area under cane was close upon 33,000 acres. Since then, chiefly ing to the fear of the growers that the sugar duties would be together abolished, the area decreased by about 7,000 acres. As it s now been decided to maintain the duties at 60 per cent. of their evious amount, it is anticipated that the area under cane will increase ring the next season.

The year 1890 proved very encouraging to the dairy farmers, and e quantity of butter and cheese manufactured was sufficient to meet al wants, and leave a small balance for export. The production of e succeeding season did not, however, equal the demand, as 1,419,100 lb. butter and 224,397 lb. of cheese were imported for local requirements. 1892, there was a surplus of 1,027,800 lb. of butter for export, while heese to the amount of 53,700 lb. had to be imported to meet local quirements. Since then the production of butter and cheese has creased very rapidly, and in 1894 there were 4,600,000 lb. of butter d 229,000 lb. of cheese available for export; but owing to the dry asons the quantities available for export in 1895, 1896, and 1897 ere comparatively small. The consumption of butter and cheese uring 1897 was 25,638,000 lb. and 4,120,000 lb. respectively.

The quantity of tea consumed is remarkably large, the average being lb. 13 oz. per inhabitant, while of coffee the average consumption is oz. The consumption of tea is universal throughout the colonies, d the four and a half million people in Australasia use fully twice e quantity of this beverage which is consumed by the millions who habit continental Europe, other than Russia. Though the soil and imate of a part of New South Wales are adapted to the cultivation tea, no systematic attempt has been made to grow this plant. The ffee berry, especially the Liberian variety, thrives in the north coast strict, but it has not yet been cultivated for commercial purposes.

The average quantity of the principal articles of common diet is given rewith for the various colonies of Australasia. It will be seen that the nsumption of wheat varies from 305·2 lb. in Victoria to 518·8 lb. in

Western Australia, the average consumption being 363 lb. per head. varies greatly in the quantity used, only 7·4 lb. being the consum of Victoria, as against 20 lb. in Western Australia. The consum of tea is largest in Western Australia, New South Wales, and Quee —with 9·5 lb. in the first, and 7·8 lb. in each of the two latter co Of sugar, the average quantity used varies from 106·3 lb. per h Western Australia to 82·9 lb. in Tasmania, the average for New Wales being 95·9 lb., and for Australasia 94·5 lb. per head. C not a favourite beverage in Australasia, the consumption bein one-twelfth that of tea. It is used most largely in Western Au where the annual demand amounts to 16 oz. The particulars f colony are as follow :—

Article.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
Grain—							
Wheat ....lb.	370·1	305·2	326·0	380·0	518·8	401·8	450
Rice ....lb.	10·3	7·4	17·1	11·4	20·0	7·5	8
Oatmeal ....lb.	8·0	5·1	4·0	4·7	7·7	...	9
Potatoes ....lb.	202·8	287·0	164·5	155·8	144·0	503·2	438
Sugar ....lb.	95·9	92·9	110·5	97·9	106·3	82·9	85
Tea . ...lb.	7·8	7·2	7·8	7·7	9·5	6·4	6
Coffee ....lb.	0·5	0·8	0·4	0·9	1·0	0·4	
Cheese .. ..lb.	3·8	3·2	3·8	2·6	6·5	...	4
Butter ....lb.	17·7	12·1	10·7	12·9	25·3	...	1
Salt ....lb.	40·8	19·0	51·9	8·2	15·9	17·8	3
Meat—							
Beef ....lb.	157·0	130·0	280·0	...	144·9	145·9	9
Mutton..................lb.	111·6	82·2	90·0	...	145·0	100·4	11
Pork and Bacon......lb.	12·9	11·4	...	...	..	16·9	..

The consumption of potatoes per head in some of the c probably less than the foregoing table shows; thus in the Tasmania the returns show a consumption of 503 lb., and Zealand, of 438 lb. It is probable that potatoes are in some yea in excess of the local requirements, and the market in Ne Wales and other continental colonies not being sufficient t this excess, it remains unconsumed or is given to live stock and Under the circumstances, it is impossible to determine the actually entering into the food consumption of the population.

The consumption of salt appears excessive in some of the while the figures for South Australia seem too low. This explained by the fact that large quantities of salt are used preserving, notably in New South Wales, Queensland, and New while in South Australia salt, taken from lagoons, is man salt in considerable quantities, of which there is, however, no 'robably the quantity required for domestic consumption oout 20 lb. in each colony.

by the standard of food consumed, the people of New South vell as of all the other colonies of Australasia, are fortunately Compared with those of other countries, this will most ear from the following table, the particulars given in which, xception of those referring to New South Wales, have been Mulhall's *Dictionary of Statistics* :—

untry.	Per Inhabitant.							Daily Energy—Foot Tons.
	Grain.	Meat.	Sugar.	Butter and Cheese.	Potatoes.	Salt.	Tea and Coffee.	
	lb.	lb.	lb.	lb.	lb.	lb.	oz.	
dom	378	109	75	19	380	40	91	3,552
....	540	77	20	8	570	20	66	3,914
....	550	64	18	8	1,020	17	78	4,629
....	635	51	11	5	180	19	6	3,483
....	460	61	18	7	560	14	28	3,495
....	400	26	8	4	50	18	20	2,112
....	480	71	6	3	20	17	6	2,567
....	500	49	12	3	40	17	18	2,629
....	560	62	22	11	500	28	112	3,904
....	440	78	13	14	500	40	144	3,489
....	560	64	22	22	410	25	140	3,855
....	560	57	35	15	820	20	240	4,487
....	590	65	27	15	1,050	...	142	4,886
....	440	62	26	11	140	...	110	2,658
....	400	82	4	9	80	...	8	2,325
....	400	84	4	9	80	...	8	2,333
s	370	150	53	20	170	39	162	3,218
....	400	90	45	22	600	40	72	3,797
Wales	388	281	96	22	203	41	133	4,161

he articles of the foregoing list, with the exception of tea and reducing them to a common basis of comparison, it will be the amount of thermo-dynamic power capable of being by the food consumed in this colony is greater than that of ountry mentioned in the table. For the purpose of compariures of Dr. Edward Smith, F.R.S., in his well-known work nave been used, and the heat developed has been reduced valent weight lifted 1 foot high. In estimating the thermofect of food, grain has been reduced to its equivalent in flour, has been paid to the probable nature of the meat consumed. for potatoes are given as they appear in the *Dictionary of* but it is a probable supposition that but a small proportion of the quantity over 400 lb. set down for any country is required human consumption, and the figures relating to some of the countri are, therefore, excessive. The substances included in the table a largely supplemented both in America and in Europe by other fo but not more so than in these colonies; and the figures given w probably afford a just view of the comparative quantity and t value of the articles of consumption in each of the countries mentio The comparison will appear much more strongly in favour of th colonies when the average amount of work which each individu the community is called upon to perform is taken into considerat In Australasia the proportion of women and children engaged laborious occupations is far smaller than in Europe and America, the hours of labour of all persons are also less, so that the amoun food-energy required is reduced in proportion. If allowance be m for the fact that only 40 per cent. of the population are adult m 33 per cent. women, and 27 per cent. children, the quantity of consumed in New South Wales would appear to be far in excess of actual requirements of the population, and though the excess ma looked upon as waste, it is none the less evidence of the wealth o people whose circumstances permit them to indulge in it.

The following table gives the annual consumption of tobacc Australasia and the principal countries of the world. The u tobacco appears to be more prevalent in Western Australia Queensland than in any of the other colonies, while the least cons tion is in Tasmania and South Australia. Compared with other of the world, the average consumption of Australasia will not ap excessive :—

Country.	lb.	Country.	lb.
Australasia—		Austria-Hungary	3·77
New South Wales	2·57	Italy	1·34
Victoria	2·15	Spain	1·70
Queensland	2·96	Holland	6·92
South Australia	1·92	Belgium	3·15
Western Australia	4·07	Switzerland	3·24
Tasmania	1·80	Sweden	1·87
New Zealand	2·10	Denmark	3·70
United Kingdom	1·41	Turkey	4·37
France	2·05	United States	4·40
Germany	3·00	Canada	2·11
Russia	1·23	Brazil	4·37

CONSUMPTION OF INTOXICANTS.

The consumption of wines, spirits, and fermented liquors has decreasing for some years, although some years show slight incr over the preceding years, as will be seen from the following statem wing the average consumption of spirit per inhabitant during the st ten years :—

	Gallons.		Gallons.
1888	2·88	1893	2·30
1889	2·73	1894	2·17
1890	2·68	1895	2·08
1891	2·83	1896	2·10
1892	2·67	1897	2·15

These figures represent the amount of alcohol contained in the liquor sumed ; the quantities are given in proof spirit as being a measure re easily understood, if less scientific, than that of absolute alcohol.

The state of things depicted in the foregoing table is due to a com- ation of causes. Four of these are most notable—the more stringent visions of the Licensing Act, the decrease in the proportion of gher labourers to the general community, the depression in trade, l, lastly, the spread of teetotal principles. It would be futile to empt to determine how these causes have operated individually in reasing the consumption of intoxicants ; but the fact of such a rease cannot be gainsaid, for the direct evidence given above is roborated by the general decline in the number of arrests on charges drunkenness.

The volume of spirits consumed in the colony during 1897 was 79 gallons of locally distilled, and 919,426 gallons of imported spirits, all 926,605 gallons, equal to 0·71 gallons per head—a quantity not ite two-thirds of the consumption during the year 1888, as will appear m the following table :—

Year.	Quantity Consumed.		Year.	Quantity Consumed.	
	Total.	Per Inhabitant.		Total.	Per Inhabitant.
	gallons.	gallons.		gallons.	gallons.
1888	1,164,975	1·10	1893	999,984	0·83
1889	1,159,380	1·07	1894	952,170	0·77
1890	1,201,946	1·09	1895	921,468	0·73
1891	1,268,368	1·11	1896	941,715	0·73
1892	1,184,042	1·00	1897	926,605	0·71

he average consumption of beer per head of population has declined siderably during the last ten years. From the following statement, ever, it will be found that both the quantity of beer imported and quantity locally brewed during the year 1897, showed a slight increase he figures of the previous year, and that the total consumption of

the year was lower than that of 1891 and 1892, but higher than that
ny of the other seven years of the decennial period :—

Year.	Colonial.	Imported.	Total.	Per Inhabitant.
	gallons.	gallons.	gallons.	gallons.
1888	9,300,000	2,413,000	11,713,000	11·01
1889	9,515,000	2,514,000	12,029,000	10·89
1890	9,504,000	2,207,000	11,711,000	10·63
1891	10,594,000	2,464,000	13,058,000	11·42
1892	10,688,000	2,201,000	12,889,000	10·91
1893	9,642,000	1,536,000	11,178,000	9·23
1894	9,392,000	1,709,000	11,101,000	8·97
1895	9,708,000	1,629,000	11,337,000	8·96
1896	10,073,000	1,700,000	11,773,000	9·14
1897	10,688,500	1,771,500	12,460,000	9·51

The amount of beer drunk in 1888 was 11,713,000 gallons, of w
9,300,000 gallons were the produce of the colony, representing
per cent. of the total consumption. In 1897 the quantity had rise
12,460,000 gallons, of which the proportion locally made was
per cent. During the same period, however, the consumption per
declined from 11·01 to 9·51 gallons.

The wine entering into consumption in New South Wales is ch
the produce of its own vineyards; the quantity is, however, much
than might be expected in a country so eminently adapted to
culture. The consumption per inhabitant is only one-third of
of Victoria. The quantity of Australian and foreign wines consu
during each of the past ten years is shown below :—

Year.	Australian.	Foreign.	Total.	Per Inhabitant.
	gallons.	gallons.	gallons.	gallons.
1888	625,359	180,502	805,861	0·76
1889	747,435	170,526	917,961	0·83
1890	640,205	161,945	802,150	0·73
1891	788,038	173,541	961,579	0·84
1892	885,250	135,894	1,021,144	0·86
1893	921,579	97,551	1,019,130	0·84
1894	901,156	82,489	983,645	0·79
1895	727,372	80,685	808,057	0·64
1896	707,506	81,561	789,067	0·61
1897	861,737	76,494	938,231	0·72

The amount expended upon wines, spirits, and fermented li
consumed in the colony during the year 1897 was about £4,08
Of this sum, £2,269,600 was the cost of liquors to the retailer, of
£961,300 represents duty, excise, and license fees, and £1,308,30
invoice price of the goods. The cost of working the trade an

fits of the merchants and retailers, therefore, came to £1,816,800. e expenditure on liquors per inhabitant amounted to £3 2s. 4d. ring the year, which, though undoubtedly a large sum, amounting, it does, to 7·1 per cent. of the average income, is nevertheless pro- tionately smaller than the outlay in several European countries. though the average per head of population was higher in 1896 and 97 than in 1895, yet there has been a satisfactory decrease in the penditure on intoxicants since 1888, not only in the amount per abitant but even in the total sum. This will be seen from the lowing table :—

Year.	Expenditure on Intoxicants.	
	Total.	Per Inhabitant.
	£	£ s. d.
1888	4,680,000	4 10 5
1889	4,765,000	4 9 4
1890	4,774,100	4 6 8
1891	4,905,400	4 5 9
1892	4,713,900	3 19 10
1893	4,011,800	3 6 3
1894	3,930,800	3 3 6
1895	3,851,300	3 0 11
1896	4,063,000	3 3 1
1897	4,086,400	3 2 4

he rate per inhabitant and the proportion of income devoted to liquors arious countries are given below. The figures should, however, be en with this qualification, that in several of the countries enumerated iors are consumed principally with meals in place of tea or coffee, so rely partaken of in English-speaking countries :—

Countries.	Amount per Inhabitant.	Proportion of Income.
	£ s. d.	per cent.
United Kingdom	2 18 0	8·2
France	1 19 0	7·7
Germany	1 14 0	9·4
Russia	1 0 0	9·9
Austria	1 13 0	10·5
Italy	1 5 0	10·7
Spain	1 5 0	9·1
Belgium and Holland	2 0 0	8·5
Denmark	2 10 0	11·1
Scandinavia	1 6 0	7·7
United States	1 10 0	4·2
New South Wales	3 2 4	7·1

The following table shows the consu
the year 1897. The largest consum
in Western Australia, Queensland b
freely in South Australia, Victoria,
in Western Australia, Victoria, an
sumption of alcohol in all the colonie
spirit per inhabitant, ranging from
to 1·34 gallon in Tasmania. In W
is an unusually large proportion of a

Colony.	Spirits.		
	Total.	Per Inhabitant.	To
	galls.	galls.	ga
New South Wales........	926,605	0·71	93
Victoria	796,595	0·68	2,53
Queenslard..............	412,311	0·86	21
South Australia	136,264	0·38	96
Western Australia	283,975	1·89	15
Tasmania.................	64,745	0·38	1
New Zealand	474,951	0·62	10
Australasia........	3,095,446	0·70	4,92

Taking Australasia as a whole, i
most of the European countries in th
consumed by each inhabitant, as the
figures are reduced to gallons of pro
hall's *Dictionary of Statistics*, and w
Australasia were the fact of the la
females in these colonies made a feat

Country.	Consumption.	
	gallons.	
United Kingdom ...	3·57	1
France	5·10	1
Germany	3·08	1
Russia...........	2·02	1
Austria	2·80	
Italy............	3·40	1
Spain	2·85	

It is popularly supposed that Au
heavily charged with spirit as comp
This belief is erroneous. Several des
a natural strength of 30 per cent. of

made it would appear that the strength of these wines offered varies from 24 to 37 per cent. of spirit. On the same authority ated that imported beers ranged from 13·88 to 15·42 per cent. se of English, and from 9·58 to 11·76 per cent. of proof spirit ; while the local manufacture varied according to the make ·21 to 15·12, the average being 13·75 per cent. It is generally od, however, that since the imposition of excise duties on beer in 1887 the strength of the article has been somewhat and does not average more than 13 per cent. of proof spirit.

COST OF LIVING.

atest complete estimate of the annual expenditure of the people South Wales is given below ; it refers to the year 1897 :—

	£
od and non-alcoholic beverages	18,654,000
rmented and spirituous liquors	4,086,000
bacco	1,039,000
othing and drapery	7,158,000
rniture	716,000
nt or value of buildings used as dwellings	5,761,000
comotion	1,776,000
el and light	1,960,000
rsonal attendance, service, and lodging	2,428,000
dical attendance, medicine, and nursing	1,519,000
ligion, charities, education (not including State expenditure)	944,000
t and amusement	1,111,000
oks, newspapers, etc.	804,000
stage and telegrams, not incidental to earning the incomes	288,000
rect taxes not falling on trade	734,000
usehold expenses not included elsewhere	2,013,000
iscellaneous expenses	1,272,000
Total	£52,263,000

xpenditure for the year given amounted to £39 17s. 7d. per at the rate of 2s. 2½d. per day. The daily expenditure may be tributed :—

Division of Expenditure.	Per day.	Proportion of Expenditure.
	d.	per cent.
Food	9·4	35·7
Clothing and drapery	3·6	13·7
Rent	2·8	11·0
Direct taxes	0·5	1·9
Sundries (including intoxicants)	10·0	37·7
Total	26·3	100·0

According to Mulhall, the expenditure per inhabitant in the leadin countries of Europe and in the United States and Canada is as follows:-

Country.	Expenditure per head.	Country.	Expenditure per head.
	£ s. d.		£ s. d.
United Kingdom	29 14 9	Norway	19 0 6
France	23 19 4	Denmark	28 11 5
Germany	20 3 4	Holland	20 17 4
Russia	10 1 11	Belgium	25 8 2
Austria	14 4 9	Switzerland	18 0 0
Italy	11 11 0	United States	32 16 2
Spain......................	15 12 6	Canada	23 2 2
Portugal	11 5 6		
Sweden..................	20 8 4	New South Wales...	39 17 7

The table just given affords but a partial view of the question of cost of living; for if the total earnings of the countries above enu rated be considered as an element of comparison, it will be found t few countries approach New South Wales in the small proportio income absorbed in providing food for the people. The following ta given on the same authority as the preceding, shows that while actual cost of food and beverage is £17 7s. 0d. in this colony, as aga £14 4s. 9d. in Great Britain, the earnings required to pay for this f are not larger proportionately than in the countries which appear m favourably in the table. The number of working days in the yea assumed to be 300, allowing for thirteen days' sickness and fifty- Sundays:—

Country.	Average annual cost of food and beverage.	Ratio of cost of food to earnings.	Days' earnings equal to annual cost of food.
	£ s. d.	per cent.	days.
United Kingdom ...	14 4 9	42·2	127
France	12 4 5	44·0	132
Germany	10 18 5	49·1	147
Russia	5 19 7	52·0	156
Austria	7 17 4	50·8	152
Italy	6 4 10	51·2	154
Spain	8 9 0	51·2	154
Portugal	7 3 0	59·1	177
Sweden	9 18 11	45·2	136
Norway	9 15 0	47·6	143
Denmark..	11 14 0	36·0	108
Holland	10 8 0	46·0	138
Belgium	12 3 1	43·4	130
Switzerland	8 11 7	45·2	136
United States.........	9 17 7	25·2	76
Canada	8 9 0	32·5	98
New South Wales...	17 7 0	39·0	117

PRICES OF COMMODITIES.

area of New South Wales is so extensive, and the population, t on the sea-board, so scattered, that the determination with any ness of the average prices of the various commodities consumed atter of no little difficulty. No attempt has therefore been made ertain the average for the colony, and in the following pages the refer to the Metropolitan markets alone. For the earlier years thority of contemporary newspapers has been followed where the l records were obscure or silent, but since 1836 these records have available, and have for the most part been adopted. The following exhibits the average prices of eight commodities during each year 1820 :—

	Bread per 2-lb. loaf.	Fresh Beef per lb.	Butter per lb.	Cheese per lb.	Sugar per lb.	Tea per lb.	Potatoes per cwt.	Maize per bushel.
	d.	d.	s. d.	s. d.	d.	s. d.	s. d.	s. d.
	5	5½	2 9	1 1	......	......	7 3	5 6
	6	5½	2 8	1 2	......	......	7 3	5 0
	5	5½	2 6	1 3	......	......	5 9	4 9
	3½	5½	2 2	1 2	......	......	6 1	2 6
	5	5½	3 0	1 4	......	......	6 10	4 10
	4½	6	2 2	1 5	......	......	8 4	5 6
	5½	5½	2 4	0 10	......	......	9 0	4 0
	4½	6¼	2 3	1 1	......	......	8 0	5 0
	6	5	2 6	1 4	......	......	18 6	9 0
	7	6	1 10	1 1	......	......	12 6	7 9
	4½	3½	1 0	0 11	3½	2 6	8 0	3 10
	4	4½	1 8	0 6	3½	2 6	5 0	3 8
	5	5	2 3	0 7	3½	2 6	5 0	4 7
	4	3½	1 5	0 6	3½	2 6	10 0	2 11
	5	4	1 6	0 6	3½	2 6	14 0	4 4
	4	3½	1 10	0 5	3½	2 6	10 0	4 6
	5½	3	1 9	0 8½	3½	2 6	7 0	6 9
	3	4½	1 9	0 7½	3½	2 6	10 0	4 2
	5	4½	1 6	0 8½	3½	2 6	10 6	3 7
	11½	3	2 6	1 1	3½	2 6	11 0	9 0
	7½	4½	2 0	1 0	3½	2 6	9 6	5 3
	4¼	4½	2 6	0 10	3½	2 6	12 0	2 10
	5	3½	2 6	1 1½	3¼	2 6	14 6	4 9
	3½	2½	1 9	0 9	3	2 6	10 0	2 9
	2½	2	1 5	0 4½	2½	1 5	4 6	1 5
	2½	2½	1 6	0 6	3	1 6	4 6	2 11
	3½	2¼	1 8	0 6	4	2 3	6 2	4 1
	3½	2	1 2	0 7	4	2 4	5 6	2 1
	3¼	2	1 1	0 8	3¾	2 0	6 0	1 8
	2½	1¾	1 2	0 6¼	3¾	1 9	6 2	3 9

Year.	Bread per 2-lb. loaf.	Fresh Beef per lb.	Butter per lb.		Cheese per lb.	
	d.	d.	s.	d.	s.	d.
1850	4½	1¾	1	3	0	7
1851	5	2¼	1	3	0	7
1852	4½	3	1	3	0	7
1853	6½	3½	1	5¼	0	7½
1854	7½	4½	2	3	0	9
1855	9	6	2	4	1	3
1856	7½	3½	1	11	1	2
1857	5	3½	2	0	1	0
1858	6	4	2	0	1	0
1859	6	4	1	10	1	0
1860	6½	4	1	6	1	10
1861	6½	3	1	8	0	9
1862	4½	4½	2	3	0	9
1863	4	4¼	1	6	0	10
1864	5½	4	1	6	0	8
1865	7½	3	1	9	0	9
1866	6½	3	1	3	1	0
1867	3½	2½	1	6	0	7½
1868	4	3½	1	3	0	9
1869	3½	2	1	6	0	6
1870	3½	3½	1	3	0	6
1871	3½	2½	1	3	0	7½
1872	3½	2½	1	0	0	9
1873	4	2½	1	3	0	5
1874	3½	4	1	7	0	6
1875	3	3½	1	3	0	9
1876	3½	5½	1	3	0	7
1877	4	4½	1	6	0	6
1878	4	4	1	3	0	6
1879	3½	4	0	10½	0	6
1880	3	3½	0	10	0	7
1881	3½	3½	0	10½	0	6½
1882	4	4½	1	3	0	8
1883	3½	4	1	4	0	10
1884	3	4½	1	3	0	9
1885	3	4½	1	9	1	0
1886	3½	4½	1	9	1	1
1887	3½	4	1	4	0	10½
1888	3	4	1	7	0	8½
1889	3½	3	1	4	0	9
1890	3½	4	1	0	0	8
1891	3½	4	1	1	0	9
1892	3½	4	1	3	0	8
1893	3¼	4	1	1½	0	8
1894	2¾	3	1	0	0	8
1895	2¾	3	1	0	0	8
1896	3	3	1	0	0	8
1897	3	2½	1	0	0	8

The most noteworthy feature of the history of prices in the colony—he great range of some of the commodities during the year—is not nclosed by the foregoing table. This variation is most noticeable uring the early years, and amongst articles of local production, and as the result of the almost complete isolation of the colony from the arkets of the world. Prior to the discovery of gold, communication y letter with the outside world was at best uncertain, and as late n 1878 the regular mails were made up but once a month. The stablishment of telegraphic communication, amongst other results, as had a marked effect on prices, so that except in rare instances, nd for goods produced in excess of the demand, the production f Australia no longer determines the prices of goods required for he local markets. Exception must, of course, be made for perishble produce, which is still liable to a great range in price during he course of a single year, as will be shown by some examples hereafter given.

Potatoes have varied in price from year to year. The lowest average or a whole twelvemonth was 3s. 6d. per cwt. in 1873, and the highest was 21s. 5d. in 1855, shortly after the discovery of gold; and it may not be without interest to note that from 1853 to 1855 the price of potatoes was extraordinarily high. Commencing with the year irst named, the averages were 13s., 18s. 6d., 21s. 4d., 10s., 14s. 6d., and 15s. 6d. per cwt. With regard to the variation in a single year, the following examples may be cited:—In 1820, from 4s. 6d. to 10s. per cwt.; in 1825, from 4s. to 12s.; in 1829, from 9s. to 26s.; in 1834, from 9s. to 19s.; in 1839, from 7s. to 25s.; n 1854, from 11s. to 24s.; in 1856, from 3s. to 11s.; and in 1888, from 2s. to 24s.

The price of maize has not been subject to very great fluctuation, since, being little used except for horse-feed, this grain is capable of being replaced by other products; nevertheless the prices have ranged from 1s. 5d. in 1844 to 10s. in 1854.

In the list given on page 1055 are included quotations for bread at per 2-lb. loaf. In most years the price varied somewhat regularly with that of wheat. There are, however, exceptions to this rule, chiefly in the years during which wheat brought an unusually high figure, when the price of bread was generally less than might have been expected. The owest price at which bread has been retailed was 2½d. in 1849, and the ighest was 14d. the 2-lb. loaf, which figure was paid for a short time in 839.

In addition to the eight commodities which are given on page 055, the following list of the average retail prices of articles rgely used may not be without interest. The information begins ith 1836, beyond which year it is difficult to determine the exact verage.

Year.	Bacon per lb.	Eggs per doz.	Rice per lb.	Oat-meal per lb.	Coffee per lb.	Salt per lb.	Beer (Col.) per gal.	Soap per lb.	Starch per lb.	Tobacco per lb. (Col.)
	s. d.	s. d.	d.	d.	s. d.	d.	s. d.	d.	s. d.	s. d.
1836	...	2 2	9	...	...	...	...	4½	...	...
1837	...	2 6	...	...	1 6	1	1 0	...	...	...
1838	...	4 0	...	...	...	...	...	...	...	...
1839	...	3 0	...	...	1 6	...	...	4½	...	...
1840	0 10	2 9	...	...	1 4	...	...	4½	...	...
1841	0 11	2 3	...	...	1 4	...	...	4½	...	...
1842	0 10½	1 11	2	...	1 4	1	1 9	4½	...	...
1843	0 10	2 0	1½	...	0 10	0½	2 3	...	...	1 4
1844	0 5½	0 11	1¾	...	0 8½	1¼	1 3	3¾	...	1 6
1845	0 6½	1 1	3	...	0 7½	1½	1 1	3½	...	1 6
1846	0 9½	1 3	1½	...	0 10	1½	2 0	5	...	1 9
1847	0 6½	1 1	3¾	6	1 1	1½	3 4	5	1 0	1 9
1848	0 9	1 3	3½	6	1 1	1½	3 3	5	1 0	1 9
1849	0 8½	1 1	3¾	5¾	1 0	1½	2 8	5¼	1 1	2 0
1850	0 8½	1 4	4	6	1 2	1¾	2 9	5½	1 0	2 7
1851	0 9½	1 8	4	6	1 3	1½	2 6	5¼	1 0	3 8
1852	1 1	1 6	4	6	1 3	1½	2 6	6	1 0	4 0
1853	1 2½	2 3	4¼	6	1 3	1½	2 4½	6	1 0	4 0
1854	1 4½	2 9	5	7½	1 6	2½	3 6	8	1 6	4 0
1855	0 11½	2 8	6	9	1 8	4	4 7	8	1 6	3 0
1856	0 10	2 2	5¼	7	1 7¼	3	3 6	7¼	1 1¼	2 6
1857	0 9½	1 11	5	7	1 8	2¾	4 0	7	1 0	2 7
1858	0 7½	2 3	6	7	1 8	4½	4 3	7	1 5	2 6
1859	0 8½	1 10	4¼	7	1 8	2½	4 0	6½	1 0	2 6
1860	1 0	1 3	5	6	1 6	2½	3 6	7	1 0	2 3
1861	0 10	1 6	4	6	1 6	2½	3 6	6	0 10½	2 0
1862	0 10	1 5	3	5	1 5	1½	2 0	4½	0 8	4 6
1863	0 10½	1 7	3	4	1 4	1½	1 6	4	0 7	3 0
1864	0 10	1 6	3	4	1 4	1½	2 0	4	0 8	1 6
1865	0 9¾	1 6	3	4	1 4	1½	2 0	4	0 8	2 6
1866	1 0	1 6	4	4	1 4	1½	2 0	4½	0 7	2 6
1867	0 10	1 7	3½	4	1 4	1	1 6	4	0 7	1 9
1868	0 9½	1 2	4	4	1 4	1½	2 0	4	0 7	1 9
1869	0 10	1 3	3	4	1 0	1	1 4	4	0 8	1 0
1870	0 10½	1 4	3	4	1 2	1	1 4	4	0 7	1 3
1871	0 9½	1 4	2½	2½	1 0	0½	2 3	3	0 4½	1 0
1872	0 9	1 1	3	3	1 1	0¾	1 4	3	0 5	1 4
1873	0 9	1 4	2½	2¾	1 2	0½	2 3	3	0 5	2 0
1874	0 8¾	1 6	3	3¾	1 4	0½	2 0	2¾	0 6	1 9
1875	0 9½	1 6	3	3	1 2	1½	3 0	3	0 5	2 0
1876	0 9	1 0	3	3	1 2	1	2 0	2¾	0 5	1 9
1877	0 8½	1 6	3	3¼	1 3	1	2 0	2¾	0 5	2 0
1878	0 9	1 3	3	3	1 3	0½	2 0	2	0 5	1 6
1879	0 8	1 7	2½	2¼	1 0	0½	2 0	2	0 5	1 6
1880	0 7½	1 4	3	3	1 5	0¾	2 0	3	0 5½	2 0
1881	0 7½	1 0	3	3	1 5	0¾	2 0	3	0 5½	2 0
1882	1 0	2 0	3¼	4	1 5	1	2 0	2½	0 6	3 0
1883	1 0	1 11	3	4	1 9	1	2 0	3	0 7	3 0
1884	0 11½	1 11	2½	3	1 4	1	2 0	3	0 6	3 0
1885	0 10½	1 10	3	3	1 5	0¾	2 0	3	0 6½	3 0
1886	0 10½	1 8	3¼	2¾	1 6	1	2 0	4	0 6½	4 0

Bacon per lb.	Eggs per doz.	Rice per lb.	Oat-meal per lb.	Coffee per lb.	Salt per lb.	Beer (Col.) per gal.	Soap per lb.	Starch per lb.	Tobacco per lb. (Col.)	Tobacco per lb. (imp.)
s. d.	s. d.	d.	d.	s. d.	d.	s. d.	d.	s. d.	s. d.	s. d.
0 10	1 7	3	2¾	1 6	1	2 0	3½	0 6½	4 0	5 6
0 10½	1 7	3	2½	1 6	1	2 0	3¼	0 6	4 0	5 6
0 11	1 8	3	3¼	1 6	1	2 0	3½	0 6	4 0	5 6
1 0½	1 6	4	3	2 0	1	2 0	3½	0 5	4 0	6 0
0 10	1 6	3	2½	2 0	1	2 0	3½	0 5	4 0	6 0
0 9	1 6	3	2½	1 10	0¾	2 0	3	0 4½	4 0	6 0
0 11	1 6	3	2¼	1 10	0¾	2 0	3	0 4½	4 0	6 0
0 7	1 3	3	2¼	1 10	0¾	2 0	3	0 4½	4 0	6 0
0 7½	1 0	2½	2	1 9	0¾	2 0	2	0 4	4 0	6 0
0 7½	1 0	2	2	1 9	0½	2 0	2	0 4	4 0	6 0
0 8	1 0	2½	2½	1 9	0¾	2 0	2½	0 4	4 0	6 0

the quotation of prices in the foregoing tables the figures given ose charged in the shops throughout the metropolitan district. It ite possible that produce of all kinds may have been bought at er rates than those stated; but the figures will be found to ent the fair average rates, having regard to the class of goods med. It is of importance to take into consideration the quality produce consumed, for very considerable changes in the direction provement have taken place in this respect. Thus, the ordinary now used, and obtainable for about 2½d. per lb., is a good white , whereas some years ago only the commonest quality of moist sugar ound on the tables of the people. A very material improvement een effected in the quality of flour, a large proportion of the at consumption being roller-made. Salt-butter still forms the bulk e supply, but it is usually of recent make; while formerly the r was imported from Great Britain, and was several months old e reaching the dining-table. The candles now used are made of ne, but the time is not remote when only the common tallow e was in general use; and so with many other articles of ordinary mption. The retail prices are those actually paid from day to day, ective of the nominal wholesale rates of the commodities in the ey markets.

onsideration of retail prices would not be complete without a state- of the price-level in different years. This can be given for foods: t present the data are hardly sufficient to establish an exact series ice-levels, taking into consideration all the elements of ordinary diture. The information in regard to foods is given below, the ption being made that the quantities entering into consumption the same formerly as at the present day. This assumption, how- is in some respects erroneous; but there appear to be no other s within reach to effect a just comparison. Sugar, tea, coffee, r, cheese, and potatoes are now more largely used than (say) prior 70; but bread, or other forms in which flour is used, and meat, are not consumed so largely. However, when full allowance is m on this score, the following table will still be found to approxim closely to the truth. The price-level is calculated on the prices rul for beef, mutton, bread, sugar, rice, potatoes, tea, beer, and tobacco

Period.	Price-level of principal Articles of Consumption.	
	1821-37 Prices =1,000.	1893-7 Prices =1,000.
1821 to 1837	1,000	1,476
1838 ,, 1842	1,032	1,524
1843 ,, 1852	712	1,051
1853 ,, 1858	1,301	1,920
1859 ,, 1862	1,147	1,693
1863 ,, 1872	865	1,276
1873 ,, 1892	809	1,194
1893 ,, 1897	678	1,000

Little practical good can be gained by comparing the prices of period with those of another, unless regard is also paid to the ear of labour, and as means of comparison are afforded in the chapt this work dealing with wages, it will be unnecessary to pursu subject further in this place.

HOUSE RENTS.

The rents paid for dwellings form a large deduction from the ea of the manual labour class in any community. Inquiries have be on foot in order to establish, as far as possible, the relations be wages and rents: but these inquiries have not yet advanced suffi to enable an opinion to be expressed in other than general terms the city of Sydney dwellings occupied by the labouring classes rents as follow:—Three rooms, from 7s. to 9s. per week, or at th of 2s. 4d. to 3s. per room; four rooms, from 10s. per week, or 2 per room; and five rooms, 12s. per week, or 2s. 5d. per room. Dwe of more than five rooms are not often occupied by labouring families, unless there are grown-up sons and daughters who cont to the family earnings. In the suburbs of Sydney houses of the referred to bring somewhat lower rents, the ratio varying from 2s. 6d. per room: while in the provincial towns, except in rare rents are still lower.

Speaking generally, the deduction from a labourer's income for amounts to 25 per cent., which, from whatever point it is viewed, be regarded as excessive. Two circumstances have conjoined to the rents in the metropolis high—perhaps higher when all thing considered than obtains in any of the other metropolitan citie

—the price of land, and the rate of interest expected by lders. As regards the former, there can hardly be any t land in and about Sydney was maintained at a fictitious iany years, and that prices have now practically subsided e level without prospect of any further serious decline. expected by property holders has been, until recently, from cent., free of outgoings. Since 1891 a decided fall has taken much lower return from house property is now readily [t may be stated in general terms that rents in Sydney and e fallen by as much as 30 per cent. during the last six years.

WHOLESALE PRICES.

ıge wholesale prices of the principal kinds of milling produce, root crops, and fodder, for each month of the year 1897, th the mean prices for the year, are given in the following The average for the whole year is given irrespective of sold in each month. In using the table it would be well ification were borne in mind, as the apparent average dividing the sum of the prices of each month by twelve some instances does, differ from the true average obtained ıto account the total sold at each price. The figures given uoted by the middlemen, and not those obtained by the vhich will be found in the chapter of this book dealing with production.

onth, 1897.	Wheat.							Bran.	Pollard.
	Milling.		Chick.		Flour.				
	Per bushel.		Per bushel.		Per ton.			Per bushel.	Per bushel.
	s.	d.	s.	d.	£	s.	d.	d.	d.
....	4	9	3	8¾	12	10	0	7½	7¼
....	4	8¾	3	7	12	10	0	7	7¼
....	4	6½	3	2	12	10	0	8	7¾
....	4	4½	3	1½	12	10	0	9	10¾
....	4	5½	3	4¾	12	6	8	11¼	11¼
....	4	5½	3	4¾	12	5	0	11¼	10¾
....	4	4½	3	8¼	12	2	0	9¼	8½
....	4	3¾	3	4¾	12	0	0	8	[illegible]
....	4	7	3	9¼	12	5	0	8¾	
....	4	8	3	7¾	12	10	0	8½	
....	4	4½	3	8	12	0	0	8¾	
....	4	1½	3	8	11	14	0	8	
ın Prices, 1897.........	4	5¾	3	7	12	5	3	8¾	

Month, 1897	Barley.		Maize.	
	Cape.	English.		
	Per bushel.	Per bushel.	Per bushel.	Per
	s. d.	s. d.	s. d.	s.
January	2 9	*	1 11¼	2
February	2 11	*	1 10	2
March	2 11½	*	2 1¾	2
April	3 0¼	*	2 5¼	2
May	3 3½	*	2 7½	2
June	3 3¼	*	2 9	2
July	3 3½	*	2 5¼	2
August	3 2	*	2 1½	2
September	3 0	3 3	2 4	2
October	*	3 3	2 4¼	2
November	*	3 3	2 5	2
December	2 7	3 3	2 10	2
Mean Prices, 1897	3 0¼	3 3	2 4¼	2

* No quotations.

The following are the quotations given for root crops, hay and dairy produce, poultry, and bee produce for 1897 :—

Month, 1897.	Potatoes.				
	Local.	Tasmanian.	Victorian.	New Zealand.	
	Per ton.	Per ton.	Per ton.	Per ton.	Per
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£
January	2 8 6	4 13 4	*	*	5
February	3 5 0	3 10 0	*	*	5
March	3 1 11	3 5 8	2 7 6	*	6
April	2 12 3	2 16 0	*	*	5
May	2 12 6	3 0 0	*	*	7
June	*	3 16 3	3 5 10	3 5 0	7
July	*	3 14 0	*	3 2 3	8
August	*	3 12 2	3 0 0	3 2 6	10
September	*	3 18 4	3 3 9	3 3 11	12
October	4 15 0	4 6 5	3 10 3	3 3 3	12
November	4 10 7	3 10 0	2 11 0	2 4 2	9
December	6 14 0	*	5 9 6	*	4
Mean Prices, 1897	3 15 0	3 12 11	3 6 10	3 0 2	7

* No quotations.

1897.	Hay.	Hay, derrick-pressed.	Straw.	Chaff. Local.	Chaff. Imported.	Lucerne
	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
....	3 19 2	2 11 8	2 17 6	3 19 2	4 5 6	2 4 7
....	3 9 2	2 4 2	2 2 11	3 10 3	4 5 7	2 8 4
....	4 0 10	2 1 3	1 18 9	3 13 11	4 5 4	3 1 3
....	3 18 1	2 6 8	2 5 6	3 19 8	4 12 6	3 12 8
....	5 0 8	3 0 0	3 3 2	5 5 3	5 13 9	4 7 6
....	4 13 1	2 17 6	2 12 6	4 18 6	5 10 0	4 11 0
....	4 12 10	2 5 10	2 6 8	4 10 10	5 2 0	3 1 6
....	3 18 7	*	2 8 4	4 4 2	4 17 6	2 7 7
....	4 14 4	1 16 4	2 7 6	4 5 10	4 16 3	2 7 9
....	4 3 10	2 2 2	2 6 10	3 19 2	4 10 8	1 18 4
....	3 13 2	*	2 4 10	3 15 2	4 2 6	2 11 5
....	3 5 4	2 13 4	2 8 1	3 14 4	4 1 5	2 10 0
rices, 1897	4 2 5	2 7 11	2 8 7	4 3 0	4 13 7	2 18 6

* No quotations.

th, 1897.	Butter. Creamery.	Butter. Factory.	Butter. Dairy.	Cheese. Loaf.	Cheese. Large.	Eggs. North Coast	Eggs. South Coast	Milk.
	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per doz.	Per doz.	Per gal.
	d.	d.	d.	d.	d.	d.	d.	d.
....	8¾	8¼	7	3½	3¼	8¼	9¼	12
....	8¼	7¾	6½	3¼	2¾	11	12¾	12
....	8¼	7¾	6½	3¼	2¾	12¼	13	12
....	10¾	10¼	9	3¾	3¼	16	17	12
....	14¼	13¾	12½	*	4¾	16¾	18	12
....	17	16½	15¼	*	4½	15½	16¾	12
....	15½	15	13¾	*	4¾	12	12½	12
....	13½	13	11¾	*	4¼	7¾	8¼	10
....	11¾	11¼	10	*	4½	6¾	7¼	10
....	9¾	9¼	8	*	5	6¼	6½	10
....	9½	9	7¾	*	4¾	7	7¼	10
....	9	8½	7¼	*	4¾	9¾	10¼	10
rices, 1897	11¼	10¾	9½	3½	4	10¾	11½	11¼

* No quotations.

Month, 1897.	Bacon.
	Per lb.
	d.
January	6½
February	6
March	5¾
April	5¾
May	5¾
June	5⅓
July	5¼
August	6
September	6¾
October	7¼
November	7⅓
December	7⅓
Mean Prices, 1897	6¼

Month, 1897.	Poult	
	Fowls.	Ducks.
	Per pair.	Per pair.
	s. d.	s. d.
January	2 8	2 9
February	2 9	2 9
March	2 9	2 9
April	2 7	2 9
May	2 9	2 9
June	2 9	2 9
July	3 1	2 11
August	3 3	3 5
September	3 6	4 0
October	3 9	4 1
November	4 1	3 5
December	4 5	3 6
Mean Prices, 1897	3 2	3 2

The prices ruling for milling produce
year were fairly steady, with the except

For locally-grown wheat the quotations ranged from 4s. 9d. in January to 4s. 1½d. in December. Barley and oats are for the most part mported, and the prices of these cereals during the year call for little notice. Maize, on the contrary, is almost wholly of local growth, and its price averaged 2s. 4¼d. per bushel; rising from 1s. 11¼d. in January to 2s. 10d. n December. In the various forms of fodder there was a gradual fall from the high prices ruling at the beginning of the year until the beginning of winter, when prices began to rise, reaching their maximum n June. From that date they fell, and the year closed with rather lower figures than it had commenced with. Root crops show very great range. Thus, locally-grown potatoes varied between £2 8s. 6d. and £6 14s. per ton; while onions sold for £12 10s. per ton in September, as against £4 8s. in December. No quotations are given in some of the columns of the foregoing tables; in the months in which these omissions occur no produce was offered, or a quantity insufficient to merit a quotation.

The wholesale prices of farm-yard and dairy produce in the Sydney markets are shown in the preceding table. The figures call for little comment beyond the caution already given in regard to the prices of commodities generally—that the averages are irrespective of the quantities sold. As regards most of the articles in the list, the lower the price the larger the consumption. The exception to this rule is poultry, which is most in demand before the Christmas season, when prices are correspondingly high. A comparison of the average wholesale prices ruling for milling produce and feed grains for the last ten years is given n the following figures :—

Year.	Milling Produce.				Feed Grains.		
	Wheat.	Flour.	Bran.	Pollard.	Barley.	Oats.	Maize.
	Per bushel.	Per ton.	Per bushel.	Per bushel.	Per bushel.	Per bushel.	Per bushel.
	s. d.	£ s. d.	d.	d.	s. d.	s. d.	s. d.
1888	4 2	10 0 0	10¼	9¾	3 0	2 7	3 0
1889	4 7	11 12 6	11	12	*	3 1	3 4
1890	3 6½	9 7 6	7½	8	2 11	2 0	3 7½
1891	4 5	11 0 0	9¾	9½	2 7	1 10½	2 7½
1892	4 6	11 0 0	11½	11½	3 2	2 7	3 1
1893	3 6½	8 16 2	8¼	8¾	3 0¼	2 8	3 9½
1894	2 9½	7 9 0	7½	7¼	2 10½	2 2¼	2 2½
1895	3 4	8 0 9	9	9	3 3	2 3¼	2 4¼
1896	4 3	10 13 1	8½	8½	2 10½	2 2¾	2 4¾
1897	4 5¾	12 5 3	8¾	9	3 0¼	2 4½	2 4¼

* No quotations.

Year.	Root Crops.		Fodder.					
			Hay.			Chaff.		
						Oaten.		Str
	Potatoes.	Onions.	Oaten or Wheaten.	Lucerne.	Straw.	Prime.	Medium.	
	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per ton.	Per
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£
1888	4 0 0	7 0 0	4 15 0	3 17 6	2 12 6	4 15 0	3 5 0	3
1889	7 0 0	18 10 0	6 0 0	4 5 0	3 15 0	6 0 0	4 10 0	4
1890	4 2 6	7 10 0	3 17 6	3 12 6	2 5 0	4 17 6	3 17 6	2 1
1891	2 15 0	4 10 0	4 15 0	3 0 0	2 5 0	4 5 0	3 5 0	2 1
1892	3 10 0	4 3 2	4 4 7	2 19 9	2 11 6	4 11 3	3 9 9	3
1893	4 14 6	6 1 2	3 10 3	3 0 5	2 3 4	4 3 4	3 15 5	2
1894	3 1 6	8 19 10	3 5 5	2 17 11	2 0 2	4 0 10	3 7 0	
1895	3 5 8	4 6 1	£3 7 6		2 11 0	£3 16 8		
1896	4 1 10	9 0 4	4 7 2		3 0 9	4 11 10		
1897	3 8 9	7 19 6	4 2 5		2 8 7	4 8 3		

* No quotations.

Year.	Butter.	Cheese (Loaf).	Bacon.	Eggs.	Poultry.				Bee Prod
					Fowls.	Ducks.	Geese.	Turkeys.	Honey.
	Per lb.	Per lb.	Per lb.	Per doz.	Per pair.	Per pair.	Per pair.	Per pair.	Per lb.
	s. d.	d.	d.	s. d.	s. d.	s. d.	s. d.	s. d.	d.
1888	1 3½	6½	7½	1 4	3 3	3 8	6 6	9 9	3¼
1889	1 1	6	7½	1 5	4 0	4 2	6 8	9 6	2¾
1890	0 9½	4	7½	1 3¼	3 2¼	3 6½	6 0¾	9 4¾	3¾
1891	0 10	5½	7½	1 3½	3 0	3 6	5 6	8 6	4
1892	1 0	4	7	1 1	3 2	3 5	5 4	7 8	3¾
1893	0 8½	3¾	6¼	1 1	3 1¾	3 2½	4 8	7 6	3½
1894	0 8	4	6½	0 11	3 3	3 4	4 9	7 10	2¾
1895	0 9¾	5¼	6	0 10¼	2 8	2 8½	4 2¼	6 6	2¾
1896	0 9½	5¼	6	0 11	3 3	3 5	4 7	9 10	3
1897	0 10½	3½	6¼	0 11	3 2	3 2	4 5	9 7	2½

The prices of the items set forth in the tables just given are mined by the local, or at all events the Australasian demand, w of course, being an exception, its price being fixed by that rul the markets of the world. The prices of pastoral and other produce, which form so large a proportion of the exports of the are not sensibly affected by local consumption. No object is gained by showing the monthly variations, so that in the foll atement, giving the wholesale prices of pastoral produce during 1897, ly the average for the year is stated :—

Commodity.		Price.
Beef	per 100 lb.	15s.
Mutton	per lb.	1⅛d.
Pork	,,	3¼d.
Wool—		
Merino, washed	,,	……….:…
,, scoured	,,	14¾d.
,, greasy, good average to superior	,,	8½d.
Crossbred, greasy, good superior	,,	7½d.
Skirtings, scoured, merino	,,	13½d.
,, ,, crossbred	,,	9d.
,, greasy	,,	6½d.
Sheepskins—		
Full wool	,,	5¼d.
Medium	,,	4½d.
Short	,,	3¾d.
Pelts	,,	2½d.
Hides—		
Cattle, heavy	,,	3⅞d.
,, medium	,,	3⅝d.
,, others	,,	3¼d.
Horse	each	7s. 6d.
Leather skins—		
Calves	,,	1s. 4d.
Kangaroo, extra large	per doz.	24s.
,, other	,,	14s.
Fur skins—		
Opossum	,,	6s. 6d.
Platypus	,,	9s.
Bear	,,	5s.
Hair—		
Horse, mane	per lb.	10d.
,, tail	,,	1s. 6d.
Ox, tail (washed)	,,	11½d.
,, stumps	,,	6d.
Bones—		
Shank	per ton	£5
Common	,,	£2 15s.
Horns	per 100	£1 2s. 6d.
Hoofs	per ton	£2
Tallow—		
Mutton	,,	£16 10s. to £17
Mixed	,,	£15 10s.
Beef	,,	£16
Wattle bark—		
Good	,,	£6 10s.
Medium	,,	£4 10s.
Tobacco—		
Good	per lb.	2½d. to 3½d.
Medium	,,	2d.

PRICE LEVELS.

The total value of the exports of the colony is greatly affected the prices obtained for certain leading lines of raw produce, of whi wool and coal are the most important. In the following table t price-level of domestic exports is given for thirty-nine years, beginni with 1860. In order to ascertain the price-level, all the princi articles of domestic produce exported have been taken, and t prices of 1898 and the average prices of the five years 1870–74 ha been applied to the quantities of each year, and the result compar with the actual total of such year. The value of the articles taken obtain the price-level amounts on an average to more than 90 per ce of the domestic exports, exclusive of gold. It is considered that t system adopted enables a truer estimate of the relative prices to obtained than that of selecting the prices of certain articles witho giving due weight to the quantities of such articles exported:—

Year.	Price-level of Exports.		Year.	Price-level of Exports.	
	1898 prices = 1,000.	Average of 1870-74 prices = 1,000.		1898 prices = 1,000.	Average of 1870-74 prices = 1,000.
1860	2,117	1,247	1880	1,534	904
1861	2,113	1,245	1881	1,522	897
1862	2,224	1,310	1882	1,571	926
1863	2,022	1,191	1883	1,571	926
1864	2,236	1,317	1884	1,558	918
1865	2,046	1,205	1885	1,368	806
1866	2,120	1,249	1886	1,315	775
1867	1,958	1,154	1887	1,351	796
1868	1,960	1,155	1888	1,311	772
1869	1,788	1,053	1889	1,332	785
1870	1,492	879	1890	1,287	758
1871	1,825	1,075	1891	1,169	689
1872	1,662	979	1892	1,107	652
1873	1,762	1,038	1893	1,002	590
1874	1,746	1,029	1894	903	532
1875	1,740	1,025	1895	926	546
1876	1,649	971	1896	973	573
1877	1,512	891	1897	946	557
1878	1,505	887	1898	1,000	589
1879	1,563	921			

These figures show that there has been a great fall in the prices colonial produce exported since 1860, or still greater since 1864, vi from the index number 1,317 to 589, or over 55 per cent. Mark fluctuations, ranging to about 10 per cent., occurred between 1860 a 1866, when the index number was about the same as in the first-nam year. From 1866 to 1870 there was a drop from 1,249 to 879, or nea 30 per cent. A rise followed in 1871 to 1,075, or about 20 per cen after which for four years prices continued fairly steady, until th was a further decline in 1878 to 887. In 1879 the level rose to 921, and for the next four years prices continued without much change, but from 1884 to 1885 there was a fall from 918 to 806. This was succeeded by a fairly even range until 1889, when the level stood at 785. From 1889 there was a steep decline to 532 in 1894, a fall of 32 per cent. over the whole period of five years. During the following two years there was a slight rise, the level for 1896 standing at 573, but in 1897 there was again a decline to 557, to be followed by a further rise to 589 in 1898. The fall during the whole period of thirty-nine years was about 53 per cent. It will be seen that the purchasing power of money has steadily increased since 1864, if the Customs values of the exports fairly represent the prices ruling in the general community, whether in the colony or elsewhere, and that 20s. in 1898 would purchase the same articles of domestic export which in 1864 would have cost nearly 45s.

The chief articles of domestic export are wool, coal, shale, live-stock, tin, silver, silver-lead and ore, copper, skins, tallow, and leather. Other articles have also been exported to considerable value in times past, but their importance has disappeared, or is lost in comparison with that of the products just named. Wool and coal have contributed greatly to the wealth of the colony, and the fluctuation in their prices has had a very marked effect on the condition of trade. The price-level of these commodities has been computed for the period which is covered by the general table just given. It will be seen that the fluctuations in the value both of wool and of coal have been more marked than those in the value of the general exports, but the same tendency to fall is clearly enough discernible:—

Year.	Price-level.			
	Wool.		Coal.	
	1898 prices = 1,000.	Average of 1870–74 prices = 1,000.	1898 prices = 1,000.	Average of 1870–74 prices = 1,000.
1860	2,528	1,573	2,278	1,408
1861	2,805	1,746	2,247	1,389
1862	2,677	1,666	2,304	1,424
1863	2,393	1,489	2,142	1,324
1864	2,527	1,573	1,654	1,023
1865	2,230	1,388	1,620	1,001
1866	2,207	1,374	1,612	997
1867	2,232	1,389	1,552	959
1868	2,088	1,299	1,547	956
1869	1,781	1,108	1,451	897
1870	1,369	852	1,346	832
1871	1,840	1,145	1,320	816
1872	1,577	981	1,338	827
1873	1,637	1,019	1,978	1,223
1874	1,611	1,003	2,106	1,302

Year.	Price-level.			
	Wool.		Coal.	
	1898 prices = 1,000.	Average of 1870-74 prices = 1,000.	1898 prices = 1,000.	Average of 1870-74 prices = 1,000.
1875	1,581	984	2,106	1,302
1876	1,519	945	2,091	1,293
1877	1,446	900	2,060	1,273
1878	1,373	854	2,047	1,265
1879	1,464	911	2,025	1,252
1880	1,482	922	1,643	1,016
1881	1,475	918	1,175	726
1882	1,455	906	1,491	922
1883	1,479	920	1,595	986
1884	1,482	922	1,601	990
1885	1,248	777	1,601	990
1886	1,159	721	1,586	980
1887	1,191	741	1,559	964
1888	1,140	709	1,610	995
1889	1,201	747	1,557	963
1890	1,124	700	1,576	974
1891	995	619	1,512	935
1892	977	608	1,365	844
1893	875	545	1,287	796
1894	810	504	1,097	678
1895	900	560	1,035	640
1896	962	599	1,054	652
1897	928	578	1,024	633
1898	1,000	622	1,000	618

A similar table for silver is given below, commencing with the 1884, when silver-mining in New South Wales first became an impo industry, owing to the discovery of the Silverton and Broken mines :—

Year.	Price-level of Silver.	
	1898 prices = 1,000.	1884 prices = 1,000.
1884	1,882	1,000
1885	1,805	959
1886	1,684	895
1887	1,657	880
1888	1,592	846
1889	1,585	842
1890	1,772	942
1891	1,675	890
1892	1,478	785
1893	1,323	703
1894	1,077	572
1895	1,109	589
1896	1,142	607
1897	1,023	544
1898	1,000	531

It must not be supposed that the colony is altogether a loser by ll in the prices of its exports, because the power of those export rchase imports must also be taken into consideration. It will, t re, be necessary to consider also the price-level of imports. As t ist no reliable data on which price-levels for imports can be based 1870, the table commences with that year :—

Year.	Price-level of Imports.		Year.	Price-level of Imports.	
	1898 prices = 1,000.	Average of 1870–74 prices = 1,000.		1898 prices = 1,000.	Average of 1870–74 prices = 1,000.
1870	1,364	966	1885	1,116	790
1871	1,370	970	1886	1,096	776
1872	1,432	1,014	1887	1,106	783
1873	1,454	1,030	1888	1,100	779
1874	1,440	1,020	1889	1,146	812
1875	1,358	962	1890	1,135	804
1876	1,333	944	1891	1,083	767
1877	1,282	908	1892	1,039	736
1878	1,271	900	1893	1,000	708
1879	1,217	862	1894	950	673
1880	1,226	868	1895	940	666
1881	1,213	859	1896	978	693
1882	1,207	855	1897	988	700
1883	1,227	869	1898	1,000	708
1884	1,217	862			

It may be said generally that the fall in prices was somewhat in fa the exports up to the year 1889. Since then the exports have f way on the average values at a much more rapid rate than the imp clearer view of the operation of the fall in prices will b ined from the table which is given below, showing the price-l imports of merchandise for home consumption, and ex domestic produce, for periods of five years, with the relativ er cent. :—

Period.	Imports.		Exports.	
	Average of five years, 1870–4, prices = 1,000.	Decline in prices in five years, per cent.	Average of five years, 1870–4, prices = 1,000.	Decline in prices in five years, per cent.
1870–74	1,000	......	1,000	......
1875–79	915	8·5	939	6·1
1880–84	863	5·7	914	2·7
1885–89	788	8·7	787	13·9
1890–94	738	6·3	644	18·2
1895–98	692	6·2	566	12·1

prices have been favourable to the colony, and there that they will be sustained during the present year.

New South Wales, in common with the other Aus is chiefly affected by the fall in prices because it is Certain calculations which have been made show that payable by the State and municipalities on their indeb and foreign creditors is £2,056,000, while the earnin made in the colony by private persons, or drawn by to £2,471,000 per annum. As the whole of the inter and municipal loans has to be paid by exports irrespe prices, and as a large portion also of the interest investors is in the same category, the fall is a matter portance to these colonies, viewed as debtor States. increase of production in New South Wales as co population has been such as partly to counteract the if the change in regard to the value of Australian pro in 1895 be continued, the condition of the colony respect most hopeful.

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